FedCure FOIA Litigation

2005-03326

Cover Sheet

This Section Contains:

C. Information related to the training methods used for operators

Location: FCI Englewood

Name and phone number of person conducting search:

K. Burton / S. Leyba

Itemiser³

Administration Training

PN: TM001018 rev.3

Prerequisites:
Operator Course
Maintenance Course

Administration functions may be assigned to Operator, Maintenance, or other personnel. This module is separate so that it may be used for any of these situations.

Course Objective: At the completion of this course the student will be able to assign user log-in codes and provide advanced menu and administrative level support.

Logging on: Demonstrate Logging on as an administrator

Menus: Demonstrate the menus and functions needed for an administrator.

Describe the following parts of the Menu Screen:

Edit Functions: Options, Configuration, Substances, & Users

View Functions: Advanced Menu, History

Action Functions: Change Mode

Advanced Menu Functions:

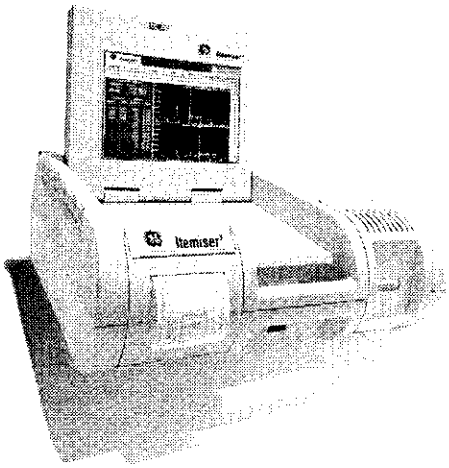
Adjust Time and Date

Upgrade Software

Saving Alarms

Course Overview

GE Ion Track

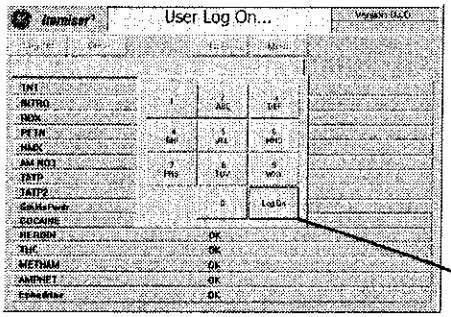


- Logging On
- Menu Screens
  - » Edit Functions
    - Options
    - Configuration
    - Users
  - » View Functions
    - Advanced Menu Functions
    - History
  - » Action Functions
    - Change Mode
- Summary

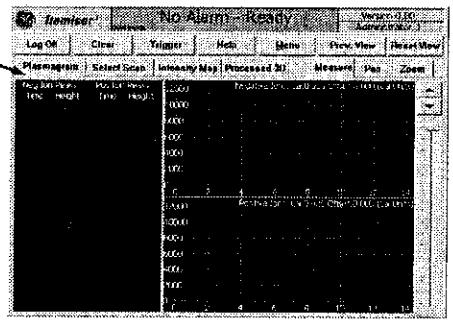
PN: TM001018 rev:3

Logging On

GE Ion Track

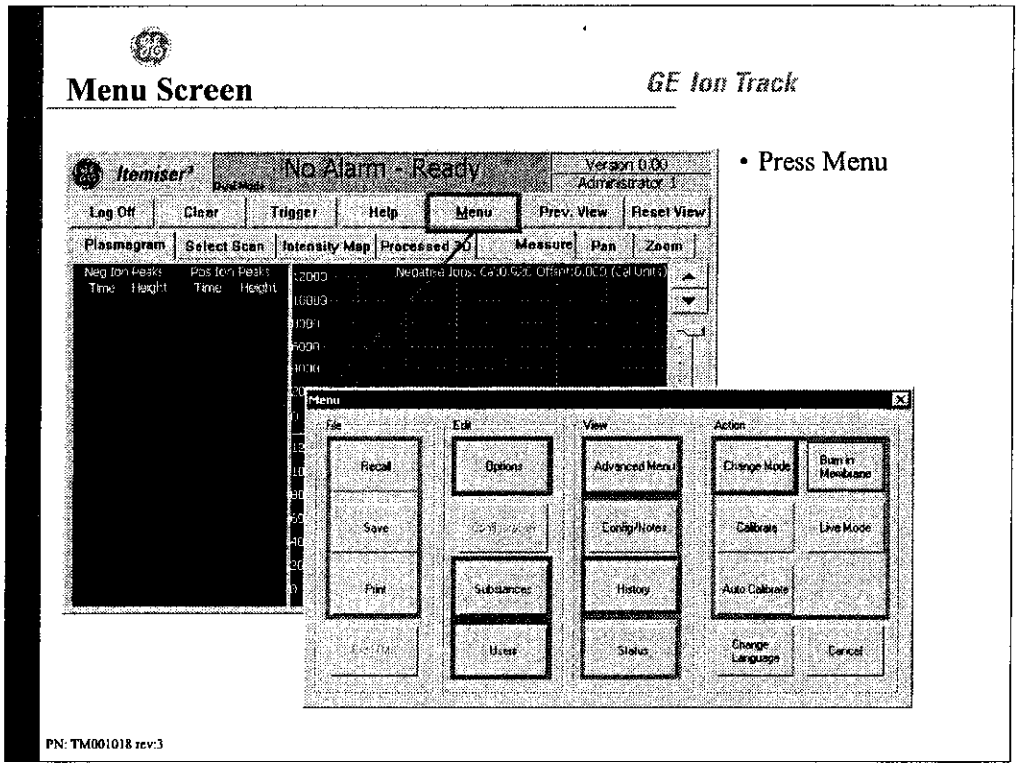


- The Administrator will need a log in PIN that has Advanced Menu Functions.
- Enter PIN and press <Log On>



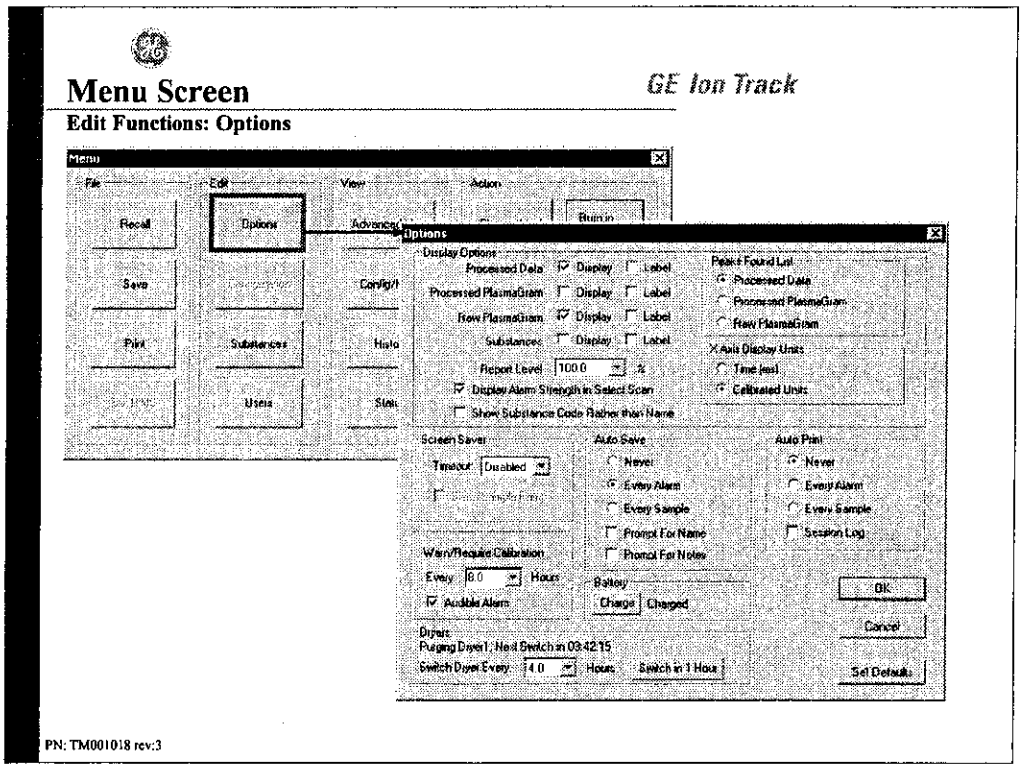
PN: TM001018 rev:3

The Advanced Menu Function PIN [Personal Identification Number (Password)] for your system is _____.



The menu sections outlined in olive green were covered in the Maintenance Course and are not covered here.

The six (6) menu sections outlined in red are covered in this course.

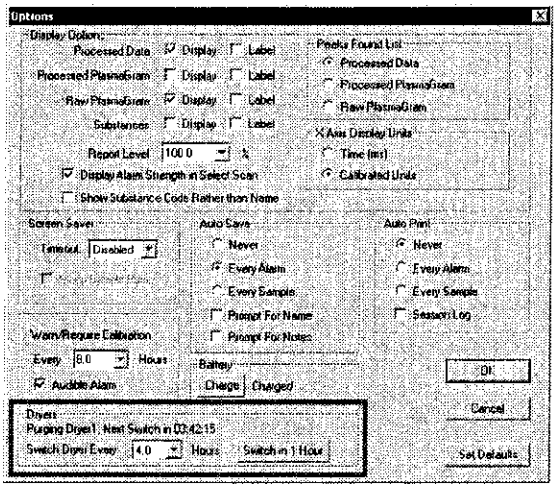


Most changes to the options screen should be performed under the direction of your service support agent.

Menu Screen

GE Ion Track

Options: Dryers



Any changes to this section of the options screen should be performed under the direction of your service support agent.

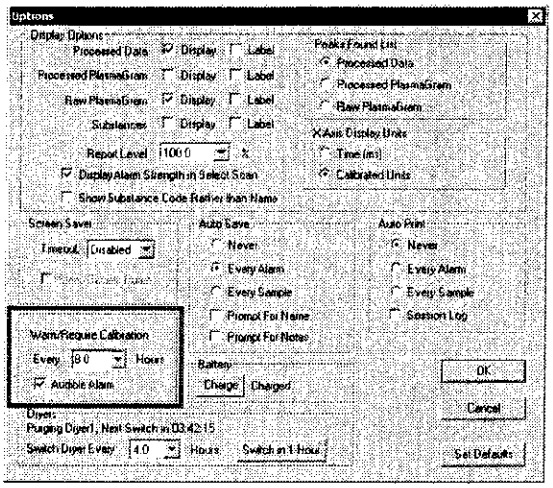
PN: TM001018 rev:3

- The Itemiser^3 has a regenerative dryer containing two chambers.
- While one chamber is being used, the other is being heated to remove moisture and contaminants.
- The Itemiser^3 switches between the two chambers at the specified interval.
- 4 hours is the recommended switch time and is the system default value. This allows for the best results in keeping moisture out of the system.

Menu Screen

GE Ion Track

Options: Warn or Require Calibration



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PN: TM001018 rev:3

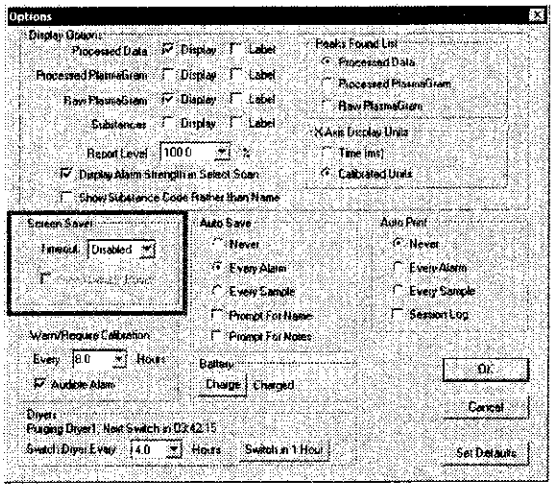
•A timed calibration warning may be set in this box. The Default setting is 8 hours.

•An audible alarm may be set to occur when a substance is detected by checking the box.

Menu Screen

GE Ion Track

Options: Screen Saver



Any changes to this section of the options screen should be performed under the direction of your service support agent.

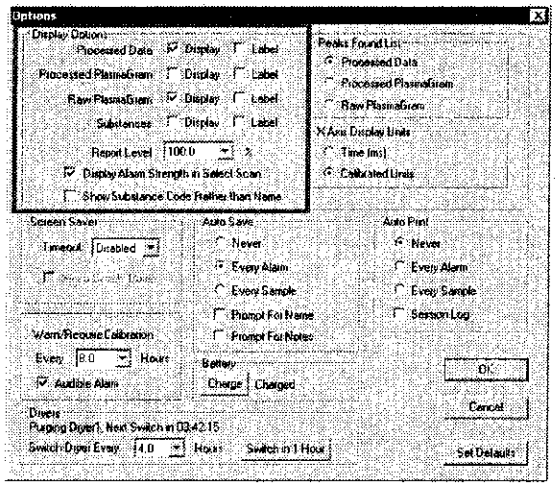
PN: TM001018 rev:3

Allows the screen saver to be enabled. Enabling the screen saver allows for the option of "sleeping" the sample pump while the screen saver is active.

Menu Screen

GE Ion Track

Options: Display Options 1



Any changes to this section of the options screen should be performed under the direction of your service support agent.

PN: TM001018 rev:3

Display Options:

Processed Data:

The single plasmagram results from a sampling analysis.

Processed PlasmaGram:

There are 70 processed plasmagrams during a 7 second sampling analysis (10 plasmagrams/second). This option allows you to view each plasmagram separately by moving a scroll bar on the right side of the screen.

Raw PlasmaGram:

This is the "raw" plasmagram data before it is transformed into processed plasmagram data

Substances:

Displays and/or labels peaks for selected substances, if selected

Report Level:

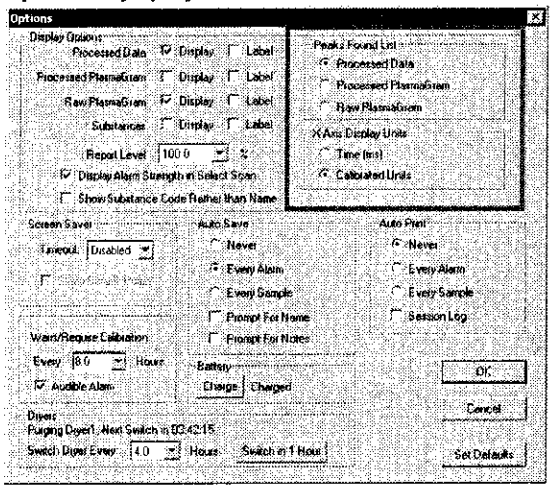
Sets the percentage of programmed alarm level required before a substance is identified and reported

Display Alarm Strength in Select Scan:

Menu Screen

GE Ion Track

Options: Display Options 2



Any changes to this section of the options screen should be performed under the direction of your service support agent.

PN: TM001018 rev:3

Display Options:

Peaks List:

Describes the left side of the screen in Plasmagram view. Only one of three options can be selected, "Processed Data", "Processed Plasmagram" or "Raw PlasmaGram". Changing this setting uses more space (memory) but does not improve performance.

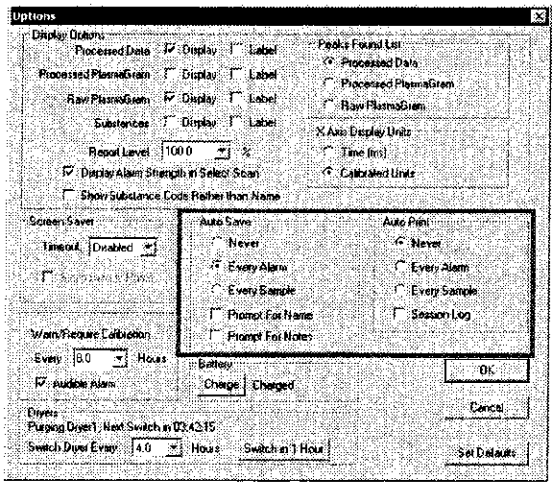
X Axis Display Units:

Specifies the units used for X axis in Plasmagram view, "Time (ms)" or "Calibrated Units". Only one can be selected. Calibrated units should be selected since the system adjusts automatically for changes in pressure and moisture.

Menu Screen

GE Ion Track

Options: Save & Print



The operator will need the optional keyboard installed if either

- Prompt for Name

-or-

- Prompt for Notes

are checked.

PN: TM001018 rev:3

Auto Save:

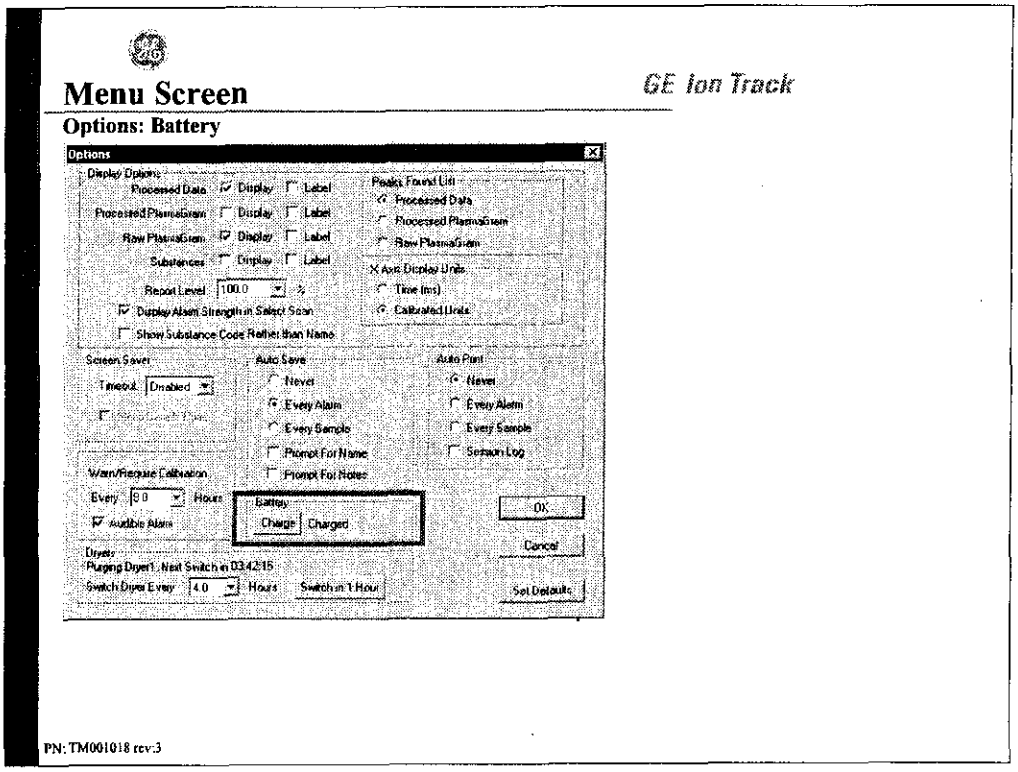
•Specifies the type of automatic saving of data to be used, "Never", "Every Alarm" or "Every Sample". Only one of three can be selected.

•Also includes two boxes that let the user specify if the system should "Prompt for Name" and "Prompt for Notes" when automatically saving data in the "Every Alarm" and "Every Sample" options.

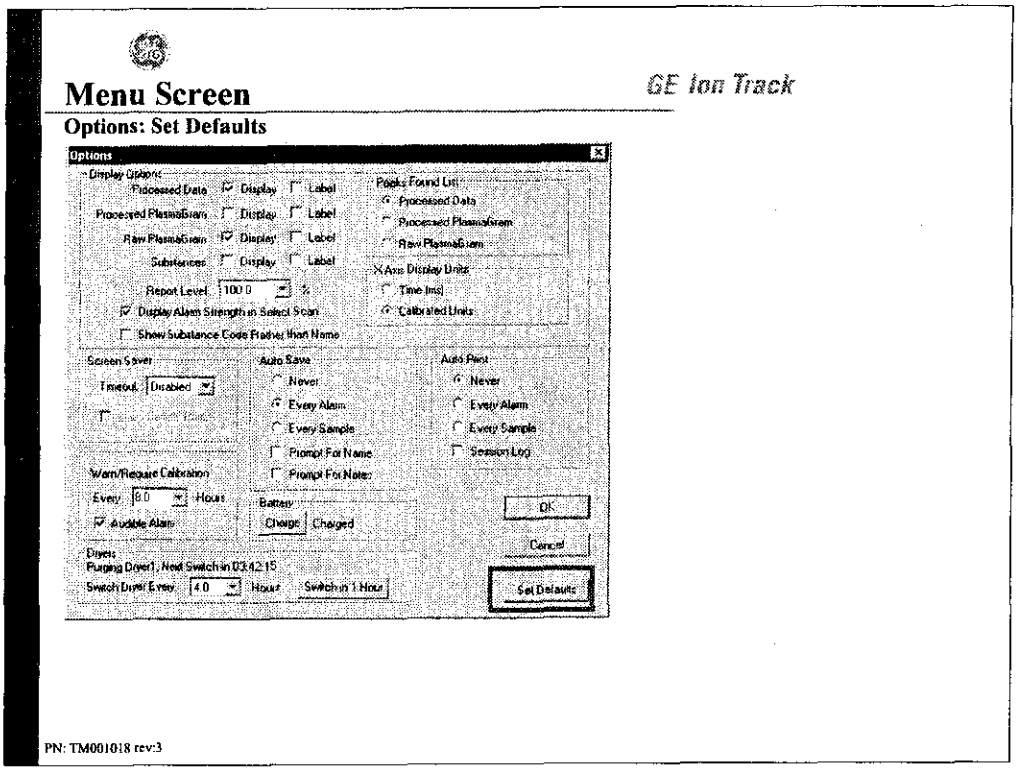
Auto Print:

•Specifies how the automatic printing of data should be employed, "Never", "Every Alarm" or "Every Sample". Only one can be selected.

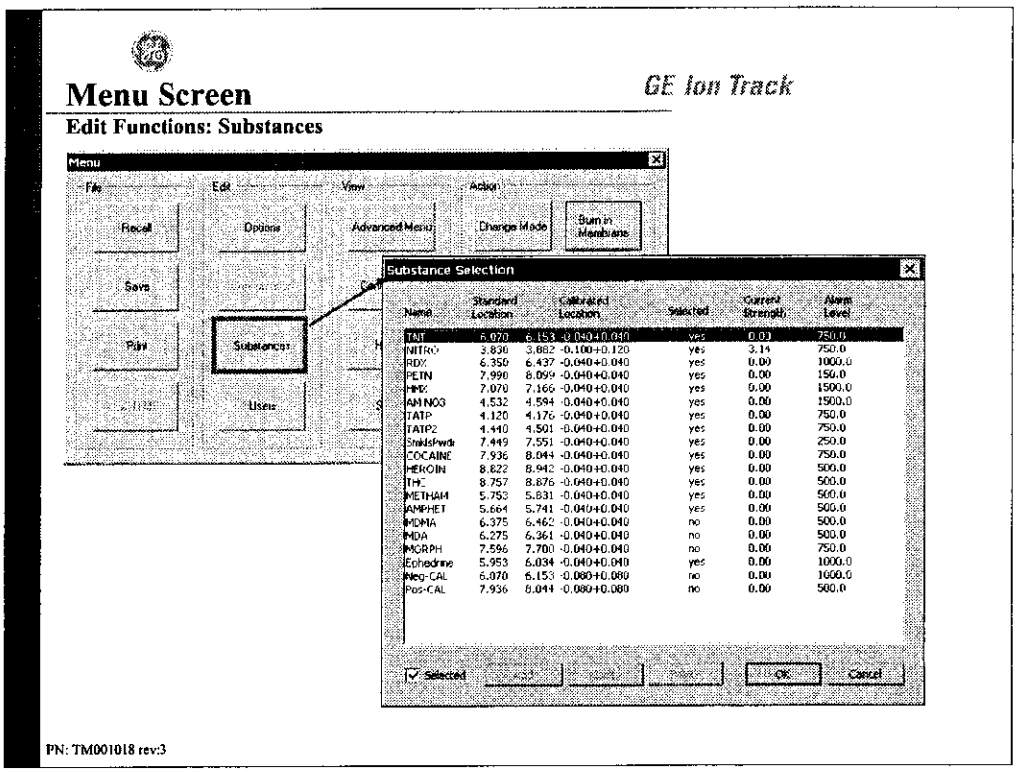
•If the "Session Log" option is selected, a session log is automatically printed at logoff. The Session Log lists calibration occurrences, saved files, warning, mode changes, and number of samples introduced.



Executes a 14-hour trickle charge on the back-up battery when connected to an AC source.

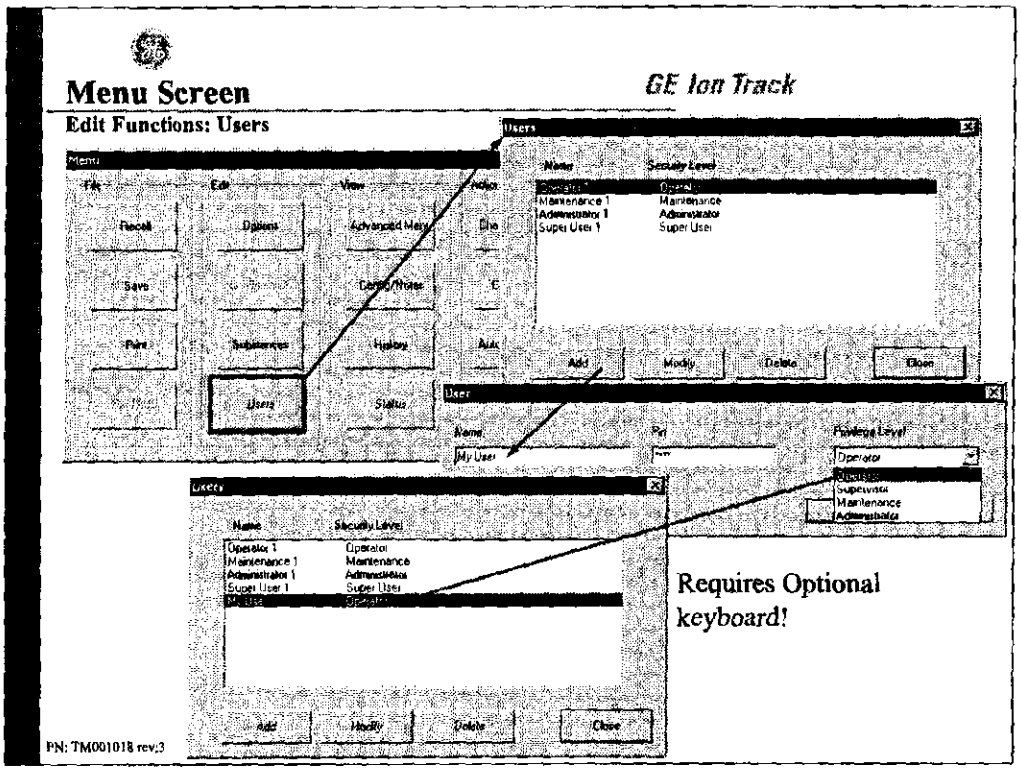


Resets Options Screen settings back to the factory default settings.



CAUTION: GE Ion Track recommends that these levels be used initially while gaining experience with the system.

Substances can be selected or deselected from the list of detected substances.



Users:

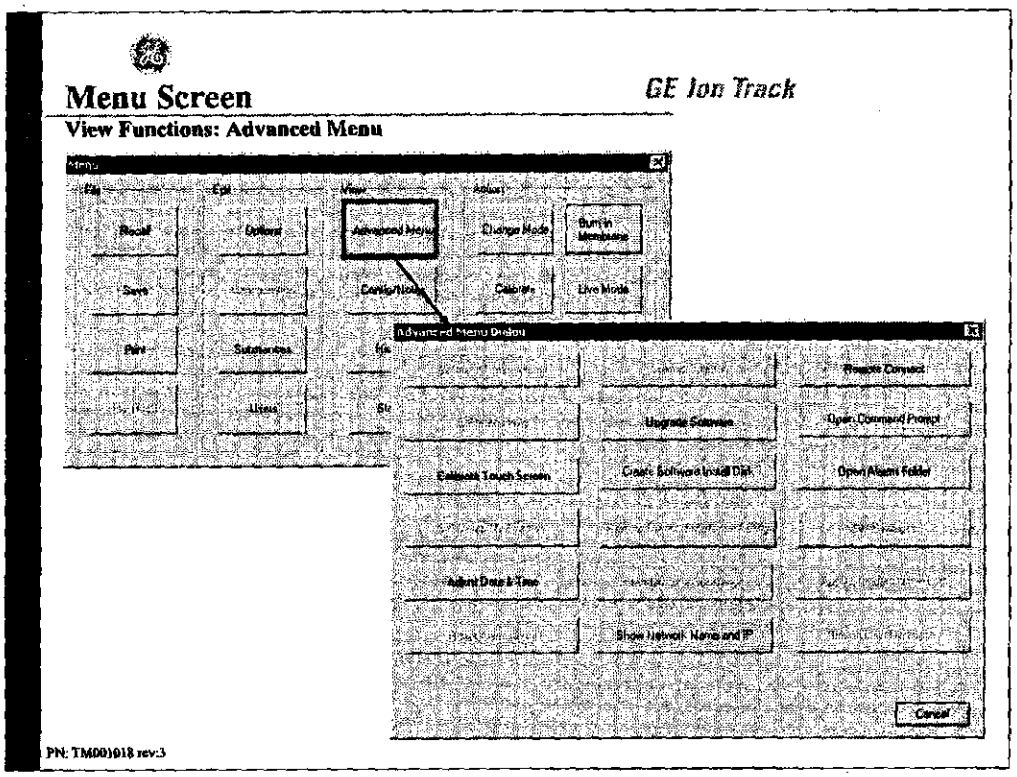
An Administrator can Add, Modify, or Delete users and assign PINs to all levels.

Each user is assigned one of 3 security levels. The Supervisor level is available for those systems that previously used the supervisor level.

While there can be any number of user log in accounts, there can be only 3 security levels. User permissions are controlled by group and cannot be modified individually.

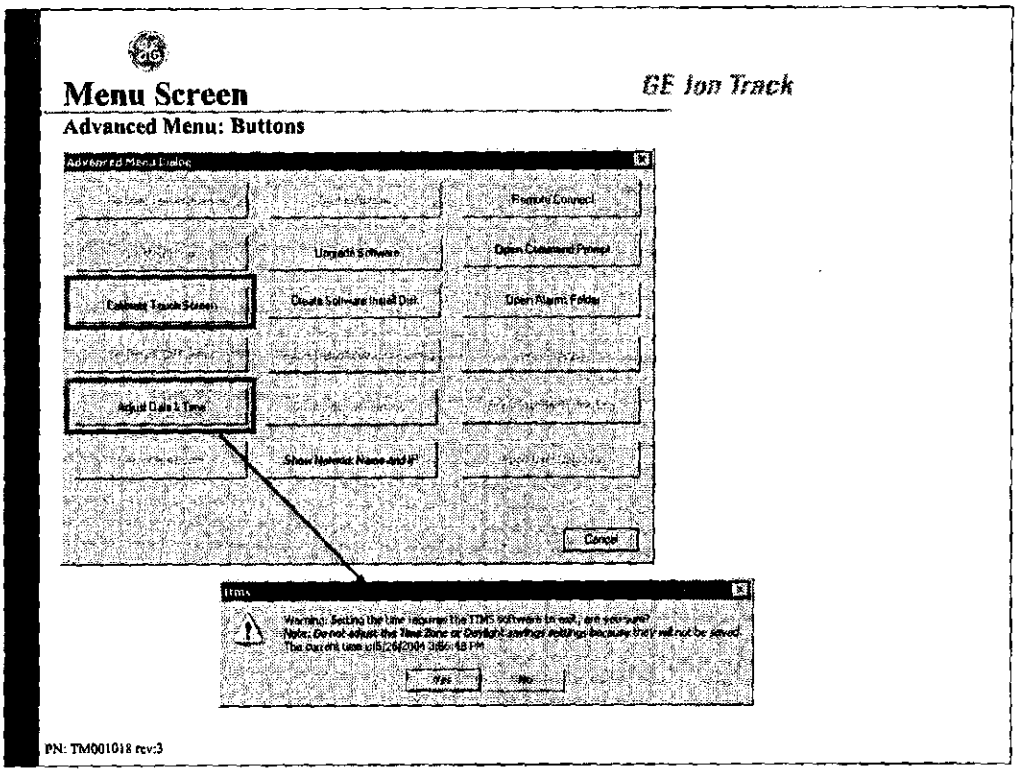
This example shows adding a new user with the name "My User" as an Operator.

There is a Super User level, but level can only be created by a Super User. It is explained and in the Troubleshooting and Repair Course and available to designated users who've had the proper training.



Advanced Menu:
Allows the user to change the following features and settings.

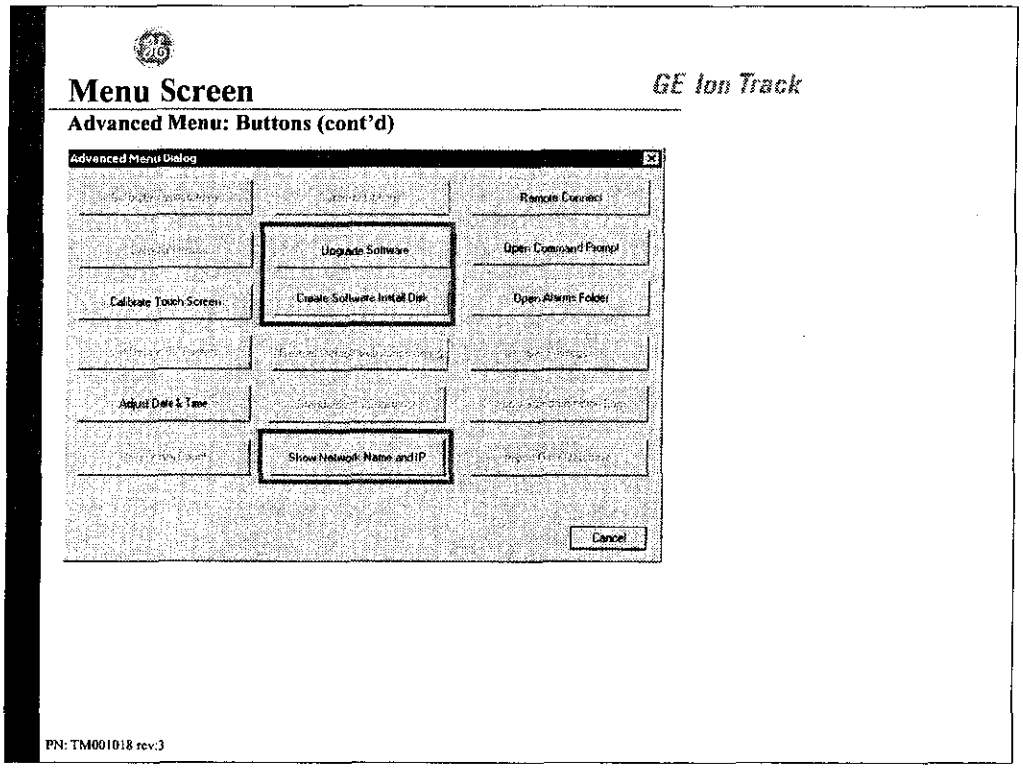
- Calibrate Touch Screen
- Adjust Date & Time
- Upgrade Software
- Create Software Install Disk
- Show Network Name and IP
- Remote Connect
- Open Command Prompt
- Open Alarms Folder



Advanced Menu:
Allows the user to change many system features and settings.

Calibrate Touch Screen - Follow on-screen instructions to calibrate touch screen.

Adjust Date & Time - Sets the system date and time. Note: System displays a warning that prompts the user to exit the software to make this change. The dialog box also warns user not to adjust the Time Zone or Daylight Savings Time settings because they will not be saved.



Upgrade Software – Upgrades Itemiser3 software with latest version from a diskette inserted into floppy drive on rear of unit.

1) Log on to the ITMS software with the Administrator PIN.

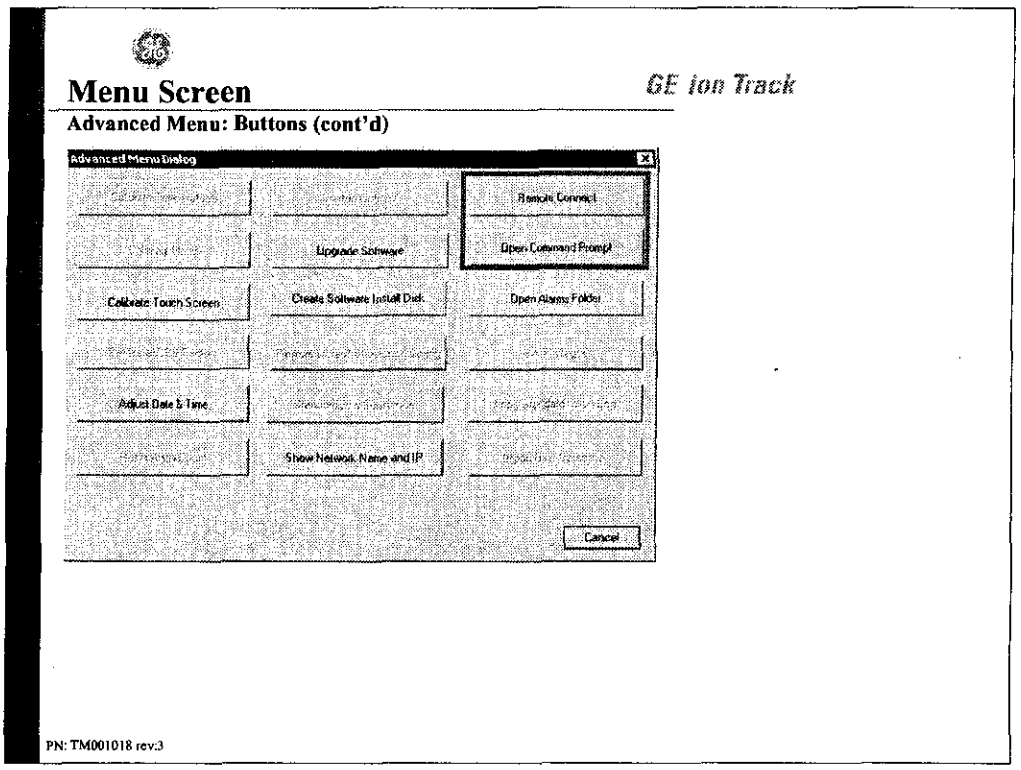
2) Press <Menu>, then <Advanced Menu>.

3) On the Advanced Menu Dialog, press <Upgrade Software> and follow the instructions on-screen to complete the upgrade.

4) After you upgrade the Itemiser3 software, be sure to fully charge the backup battery: Press <Menu>, then <Options> and press <Charge>.

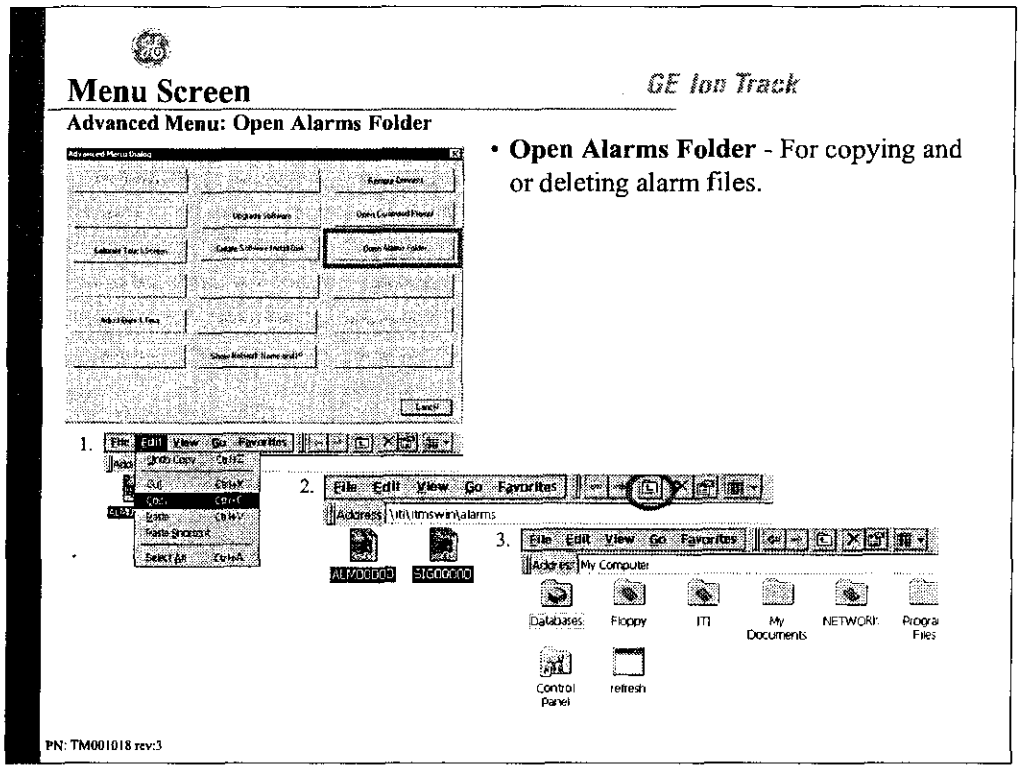
Create Software Install Disk - Creates a software install disk, which can be used for upgrading other systems or opening saved alarms on a desktop computer.

Show Network Name and IP – Displays a dialog box with the Host Name and the Itemiser3 IP address.



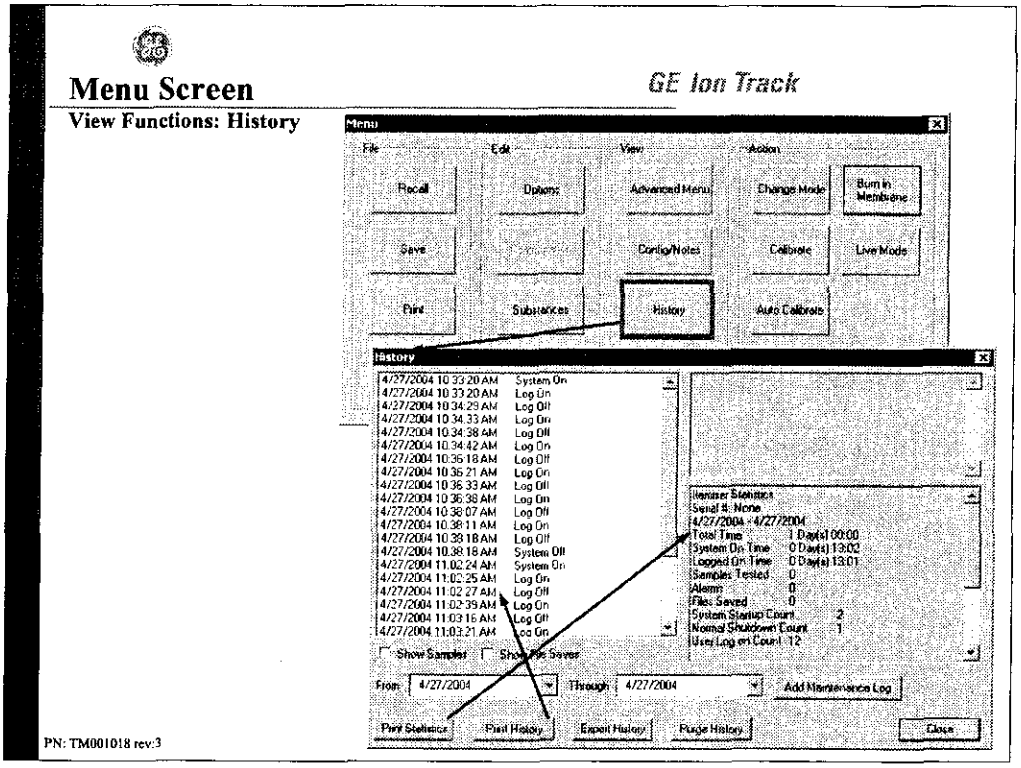
Remote Connect - Connect to a remote device through the IR port.

Open Command Prompt - Opens a command prompt window for advanced features, such as copying alarms over a network to a server.



Saving Alarm Files to Diskette

1. The Alarm Files folder can be quickly accessed at any time by pressing the Advanced menu, Open Alarms folder. From this Explorer window, select the desired files then choose <Edit>, then <Copy>.
2. To copy to a floppy press the yellow up folder button three times to get to "My Computer".
3. Insert a floppy disk, double click on the icon that says 'refresh', and a folder called "Floppy" will appear. Double click on the "Floppy" folder. Choose <File>, then <Paste> to paste the alarms to the floppy.



The Itemiser[3] System automatically records session information in a History file. This history file lists all mode changes, files saved, warnings issued, log on/off information, alarm occurrences, and manual and automatic calibrations performed. These history files can be accessed and copied to a diskette for further analysis.

The buttons, explained below, only work on the part of the history file covered by the From/Through Dates.

Print Statistics:

Prints the statistics displayed in the lower right window of the screen.

Print History:

Prints the history (shown in left side window) using the From/Through dates.

Export History:

Export History allows export of the history files to a PDA or laptop computer with Infrared Port capabilities or to a Network or File location. The file is exported as serial#.csv (the comma separated values format) which can be opened by any application that reads .csv files, such as Excel. The files also can be exported to a floppy drive, automatically at a specified time of day.

Note: The file time information will be saved as Pacific Time Zone but the data within the file will have the correct time information. This is a function of Windows CE.

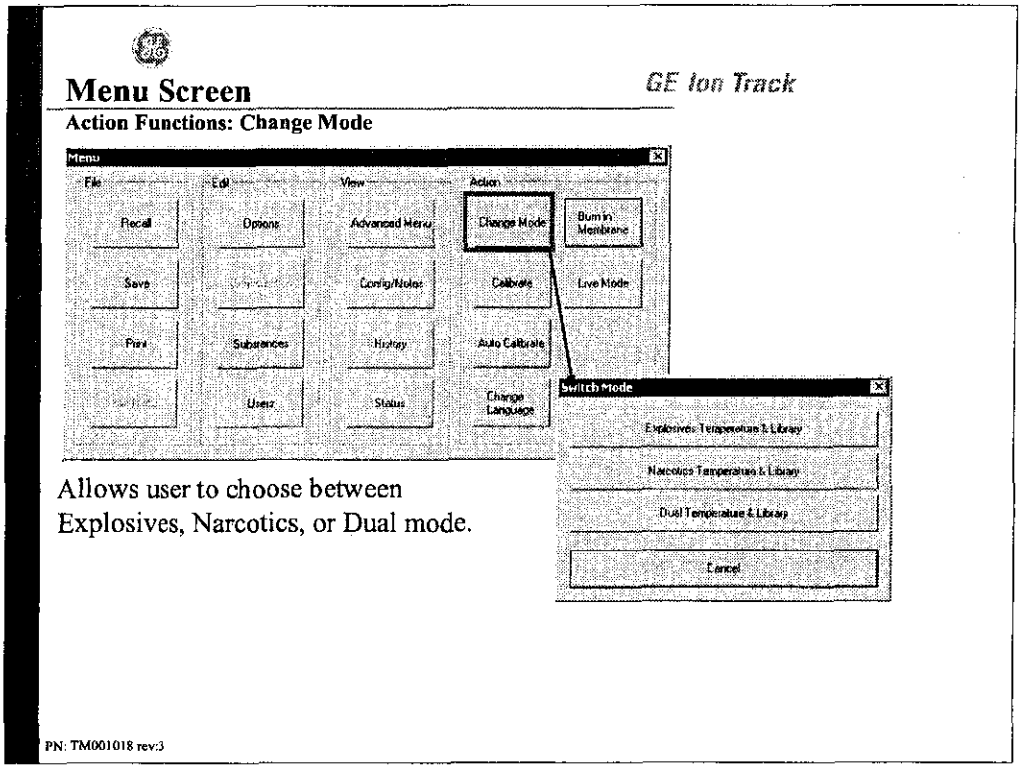
If your laptop computer or PDA is equipped with an Infrared Port, you can export the .csv file.

Purge History:

Clears the History record.

Add Maintenance log:

Allows the user to add maintenance notes to the history log.

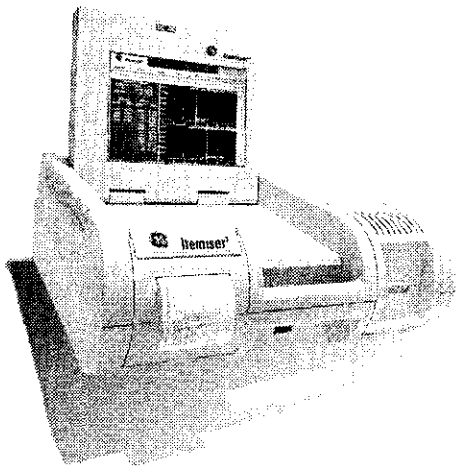


Optimizes the temperatures and substance library for increased sensitivity for target substances.

Dual mode selects intermediate temperatures to allow for detection of all selected substances.

Summary

GE Ion Track



- Logging On
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PN: TM001018 rev:3

Itemiser³

Administration Training

PN: TM001018 rev:3

Itemiser^3

Administration Training

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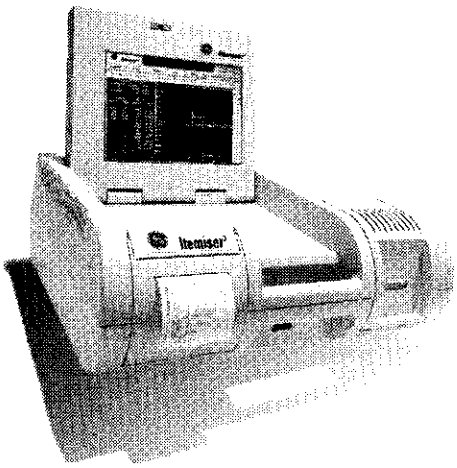
GE Ion Track



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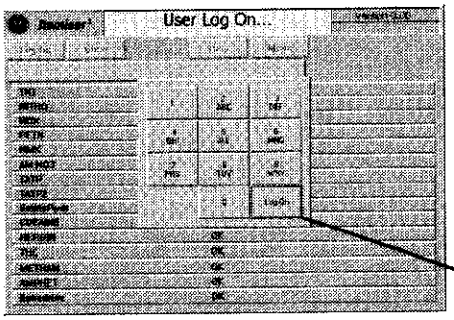
Logging On

GE Ion Track



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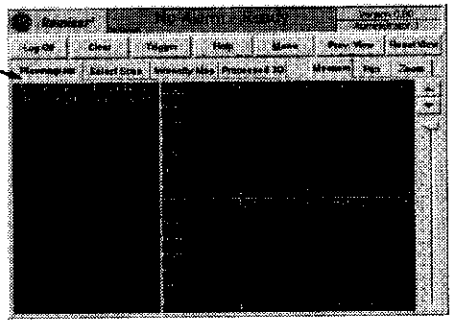

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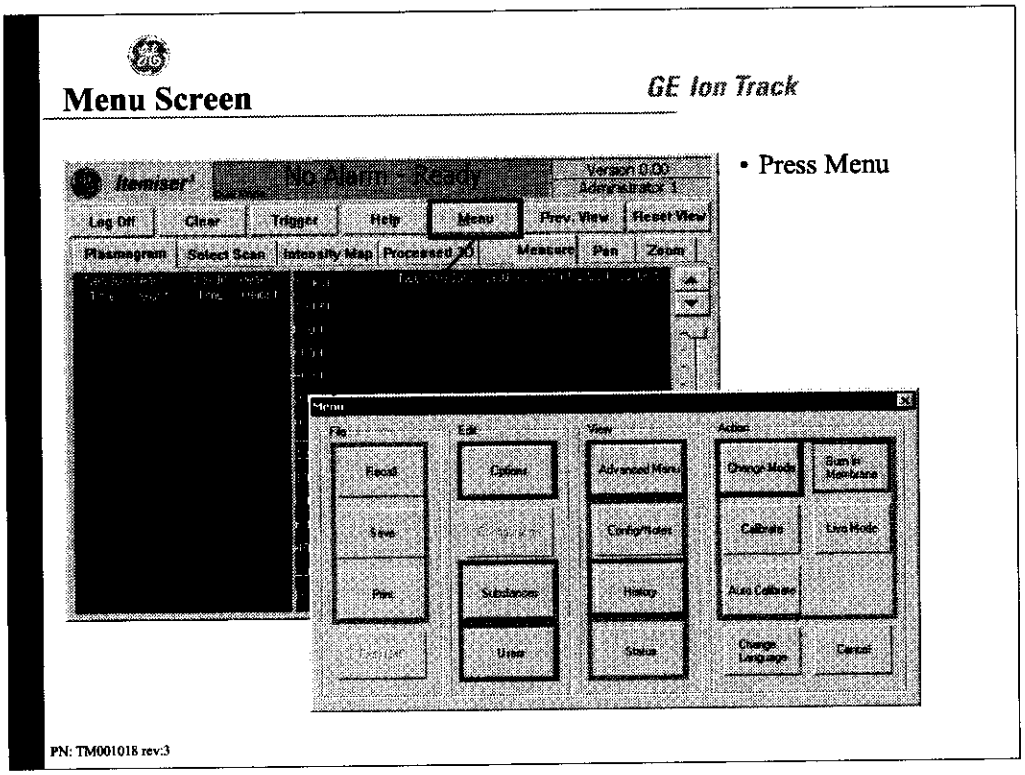

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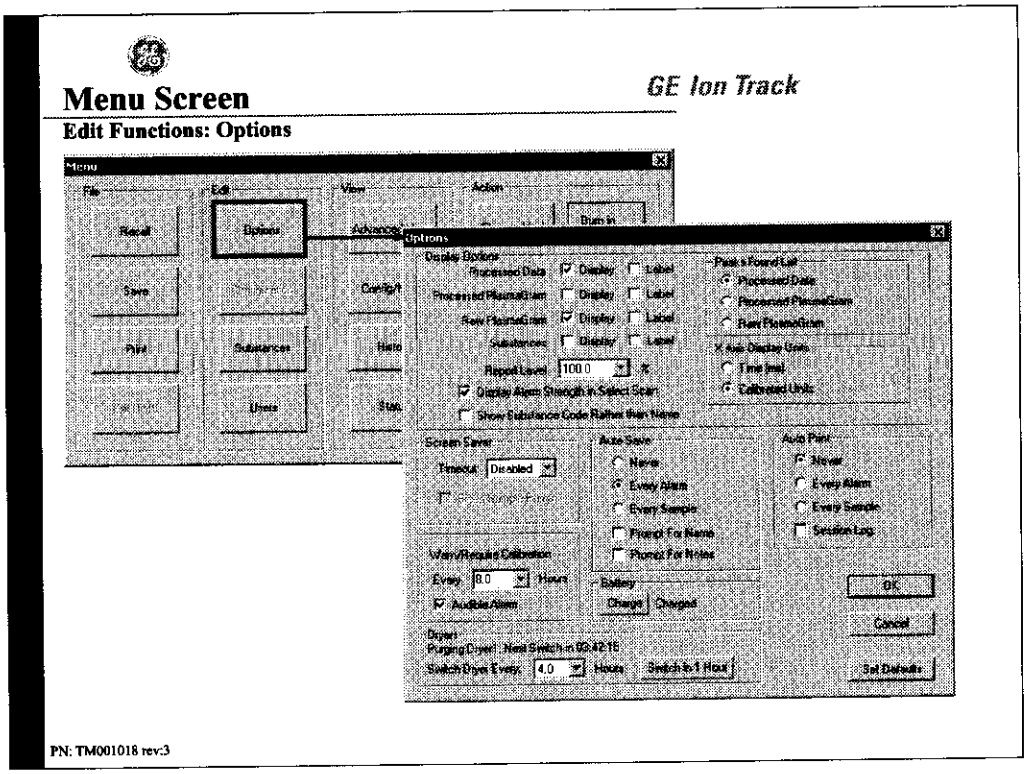

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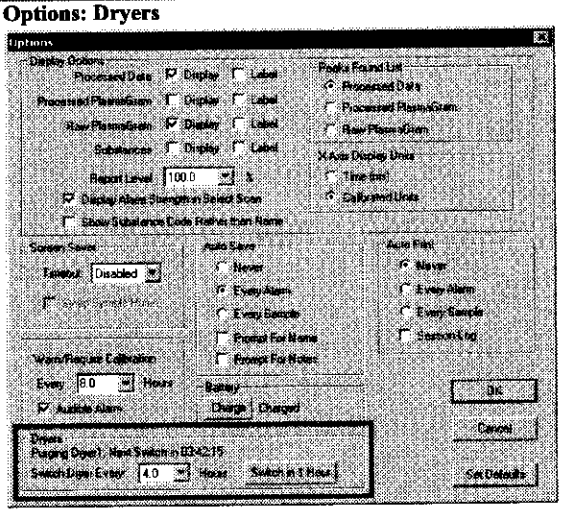
Menu Screen

GE Ion Track

Options: Dryers



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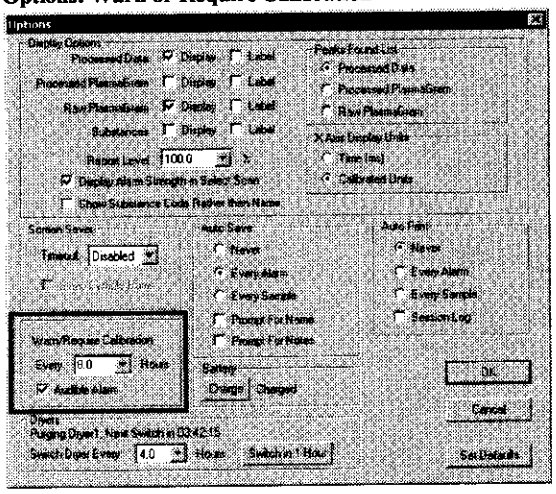
Menu Screen

GE Ion Track

Options: Warn or Require Calibration



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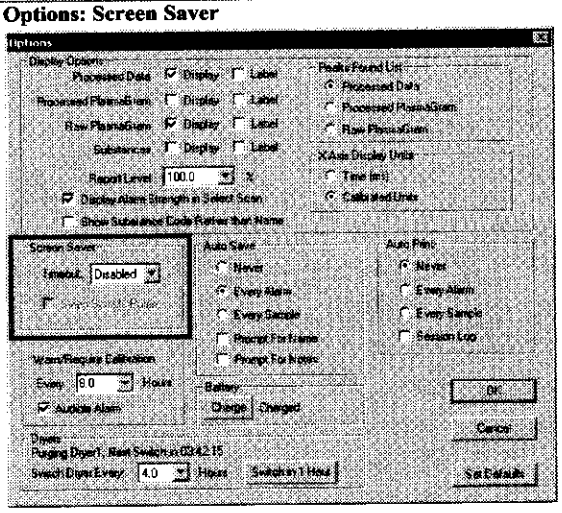
•A timed calibration warning may be set in this box. The Default setting is 8 hours.

•An audible alarm may be set to occur when a substance is detected by checking the box.

Menu Screen

GE Ion Track

Options: Screen Saver



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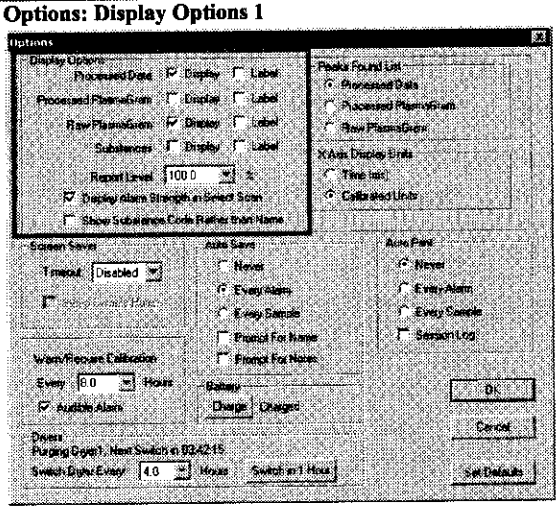
Allows the screen saver to be enabled. Enabling the screen saver allows for the option of "sleeping" the sample pump while the screen saver is active.

Menu Screen

GE Ion Track

Options: Display Options 1



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The single plasmagram results from a sampling analysis.

Processed PlasmaGram:

There are 70 processed plasmagrams during a 7 second sampling analysis (10 plasmagrams/second). This option allows you to view each plasmagram separately by moving a scroll bar on the right side of the screen.

Raw PlasmaGram:

This is the "raw" plasmagram data before it is transformed into processed plasmagram data

Substances:

Displays and/or labels peaks for selected substances, if selected

Report Level:

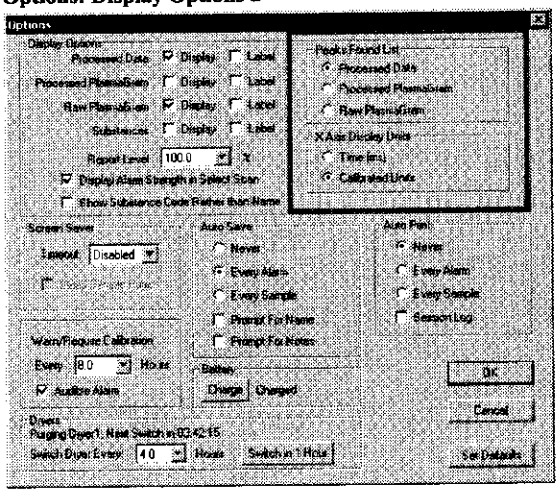
Sets the percentage of programmed alarm level required before a substance is identified and reported

Display Alarm Strength in Select Scan:

Menu Screen

GE Ion Track

Options: Display Options 2



Any changes to this section of the options screen should be performed under the direction of your service support agent.

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Display Options:

Peaks List:

Describes the left side of the screen in Plasmagram view. Only one of three options can be selected, "Processed Data", "Processed Plasmagram" or "Raw PlasmaGram". Changing this setting uses more space (memory) but does not improve performance.

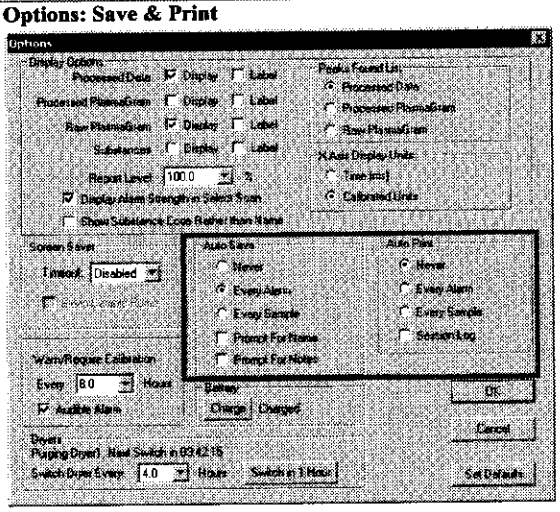
X Axis Display Units:

Specifies the units used for X axis in Plasmagram view, "Time (ms)" or "Calibrated Units". Only one can be selected. Calibrated units should be selected since the system adjusts automatically for changes in pressure and moisture.

Menu Screen

GE Ion Track

Options: Save & Print



The operator will need the optional keyboard installed if either

- Prompt for Name

-or-

- Prompt for Notes

are checked.

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Auto Save:

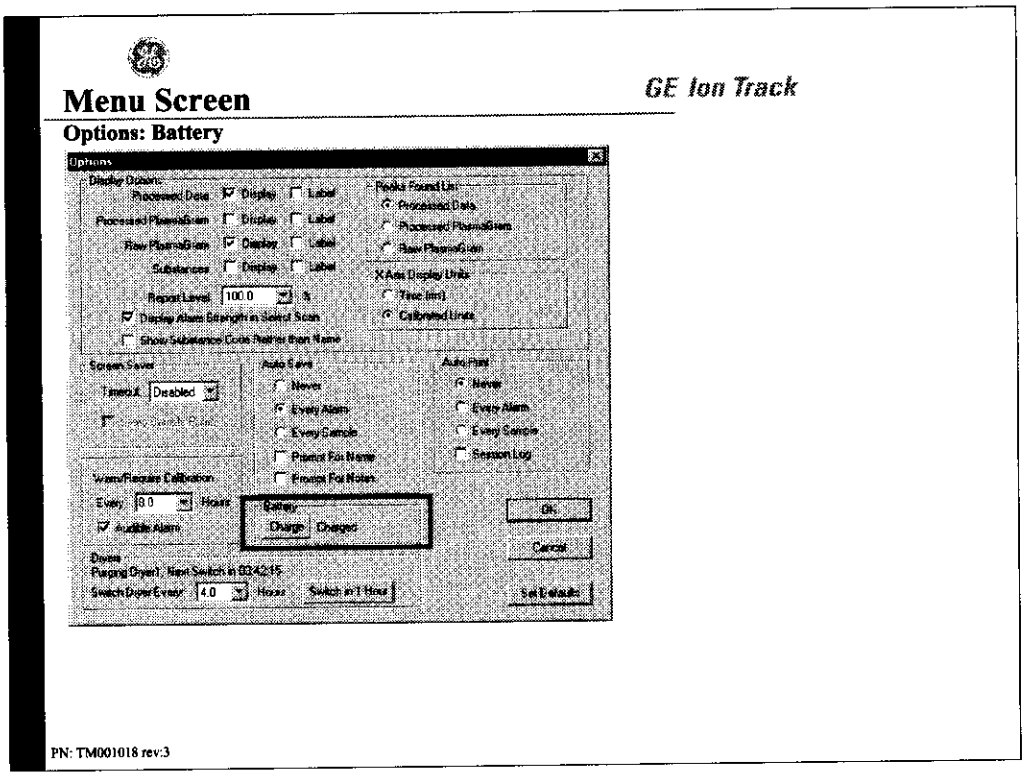
•Specifies the type of automatic saving of data to be used, "Never", "Every Alarm" or "Every Sample". Only one of three can be selected.

•Also includes two boxes that let the user specify if the system should "Prompt for Name" and "Prompt for Notes" when automatically saving data in the "Every Alarm" and "Every Sample" options.

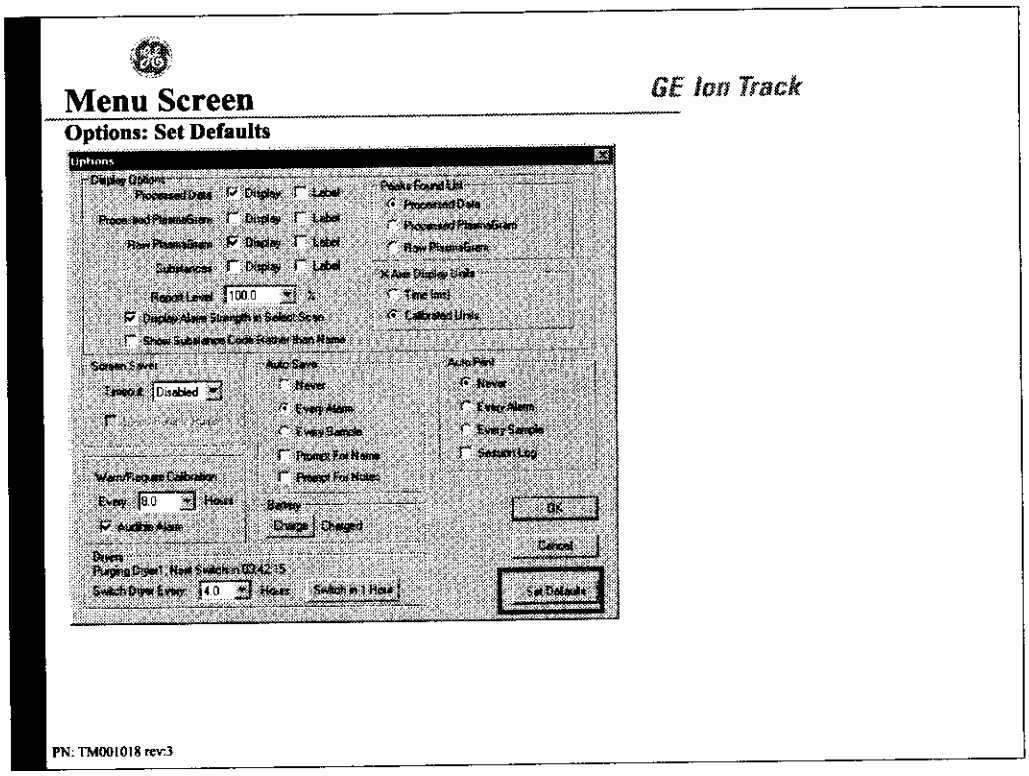
Auto Print:

•Specifies how the automatic printing of data should be employed, "Never", "Every Alarm" or "Every Sample". Only one can be selected.

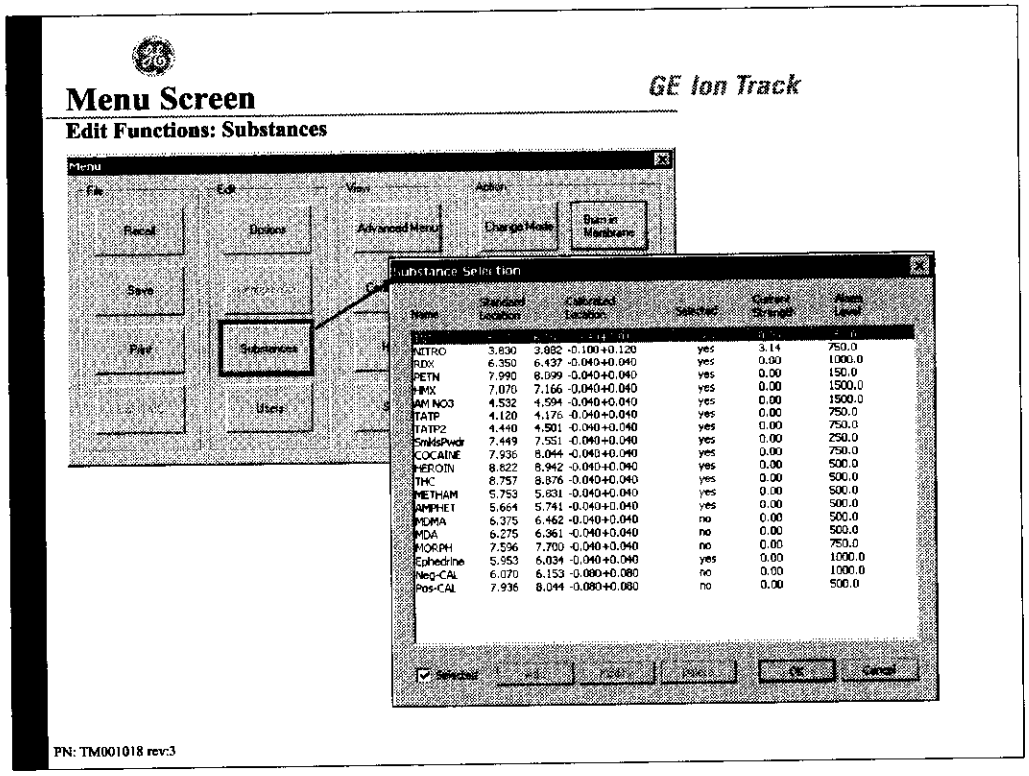
•If the "Session Log" option is selected, a session log is automatically printed at logoff. The Session Log lists calibration occurrences, saved files, warning, mode changes, and number of samples introduced.



Executes a 14-hour trickle charge on the back-up battery when connected to an AC source.

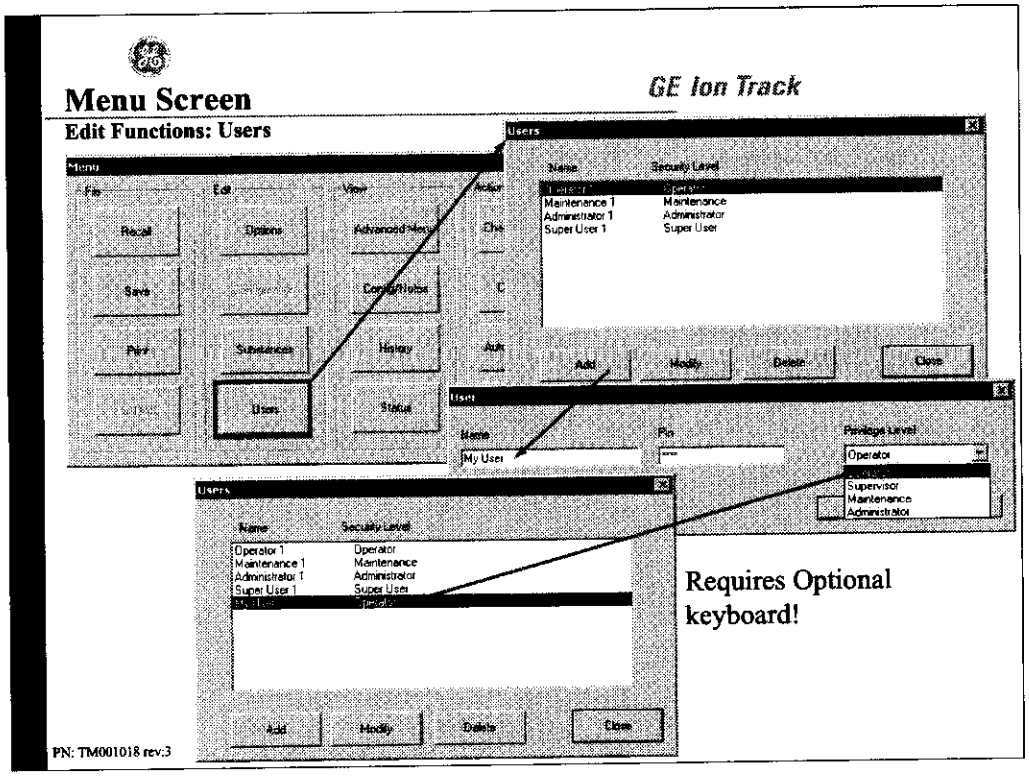


Resets Options Screen settings back to the factory default settings.



CAUTION: GE Ion Track recommends that these levels be used initially while gaining experience with the system.

Substances can be selected or deselected from the list of detected substances.



Users:

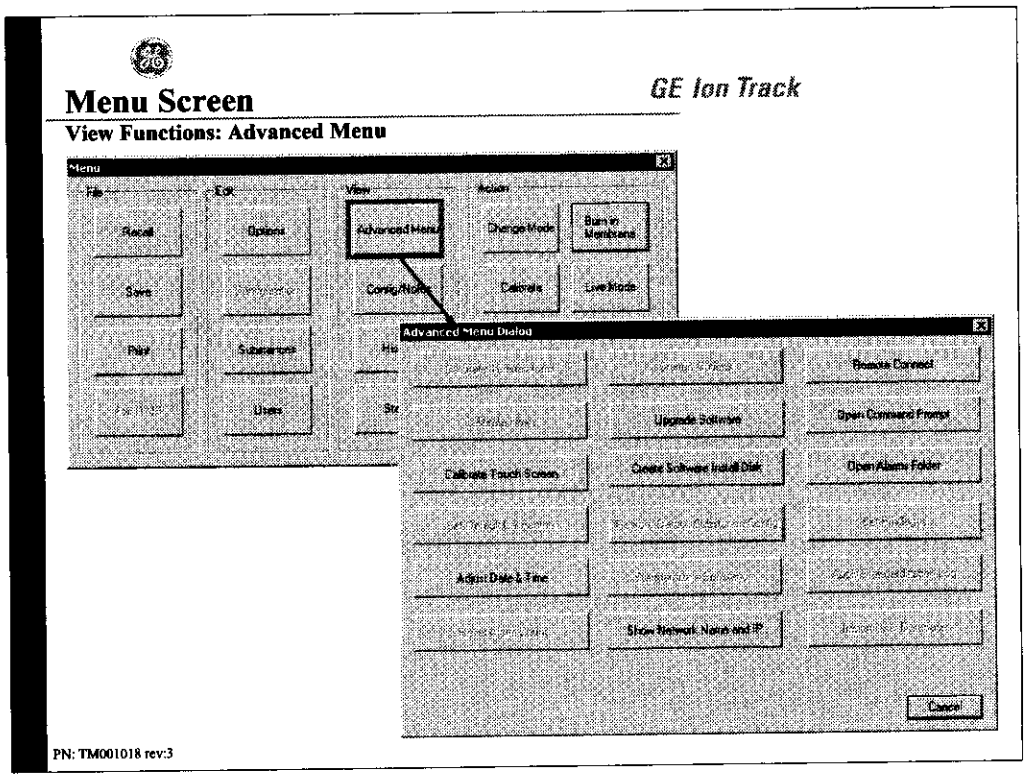
An Administrator can Add, Modify, or Delete users and assign PINs to all levels.

Each user is assigned one of 3 security levels. The Supervisor level is available for those systems that previously used the supervisor level.

While there can be any number of user log in accounts, there can be only 3 security levels. User permissions are controlled by group and cannot be modified individually.

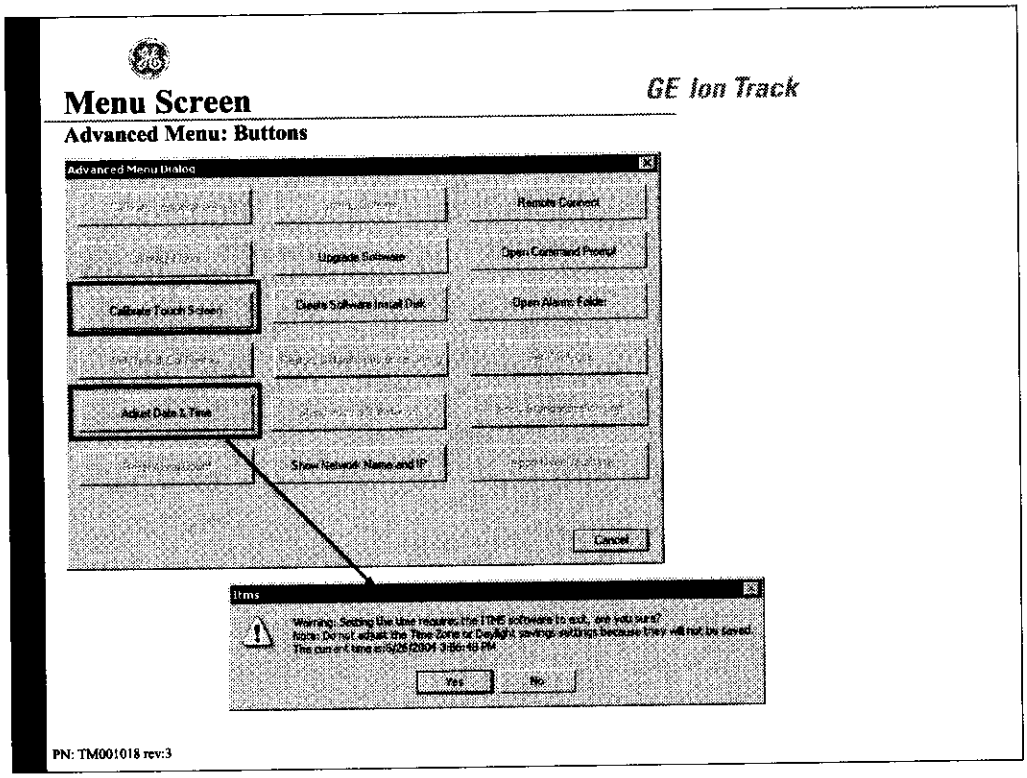
This example shows adding a new user with the name "My User" as an Operator.

There is a Super User level, but level can only be created by a Super User. It is explained and in the Troubleshooting and Repair Course and available to designated users who've had the proper training.



Advanced Menu:
Allows the user to change the following features and settings.

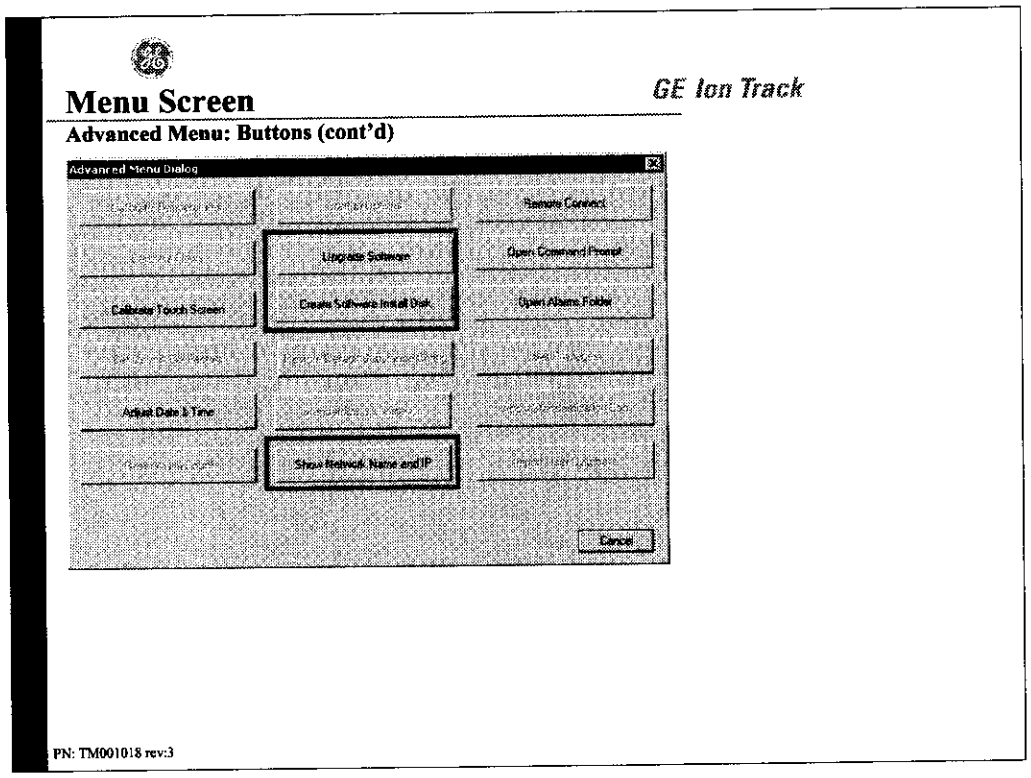
- Calibrate Touch Screen
- Adjust Date & Time
- Upgrade Software
- Create Software Install Disk
- Show Network Name and IP
- Remote Connect
- Open Command Prompt
- Open Alarms Folder



Advanced Menu:
Allows the user to change many system features and settings.

Calibrate Touch Screen - Follow on-screen instructions to calibrate touch screen.

Adjust Date & Time - Sets the system date and time. Note: System displays a warning that prompts the user to exit the software to make this change. The dialog box also warns user not to adjust the Time Zone or Daylight Savings Time settings because they will not be saved.



Upgrade Software – Upgrades Itemiser3 software with latest version from a diskette inserted into floppy drive on rear of unit.

1) Log on to the ITMS software with the Administrator PIN.

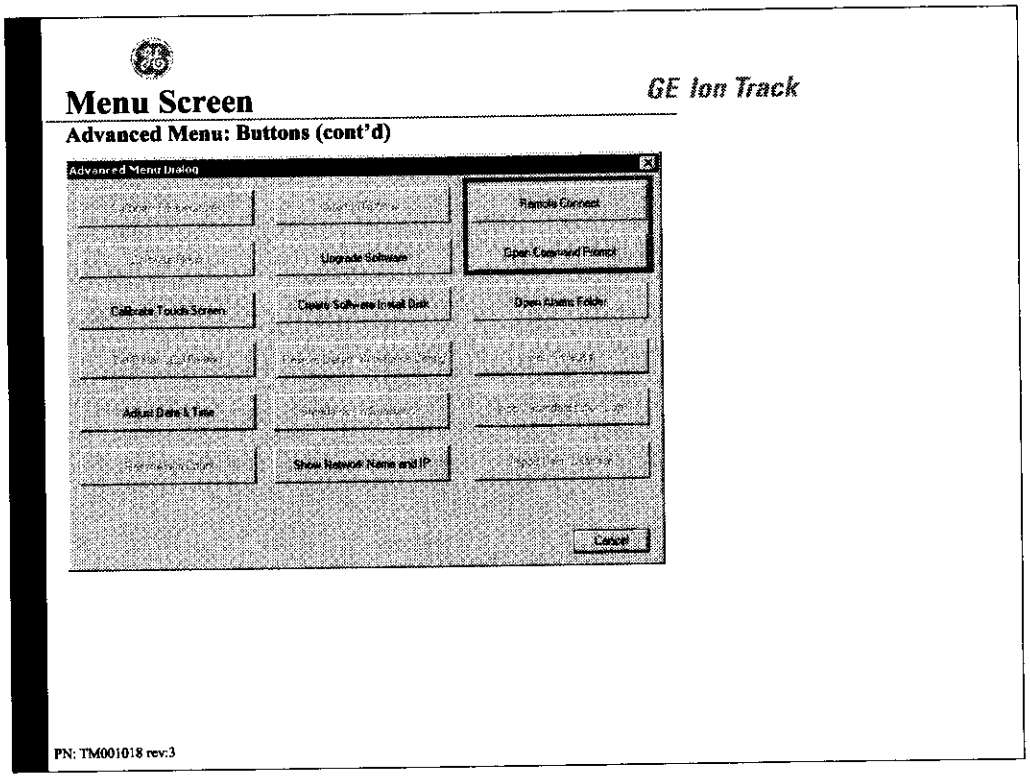
2) Press <Menu>, then <Advanced Menu>.

3) On the Advanced Menu Dialog, press <Upgrade Software> and follow the instructions on-screen to complete the upgrade.

4) After you upgrade the Itemiser3 software, be sure to fully charge the backup battery: Press <Menu>, then <Options> and press <Charge>.

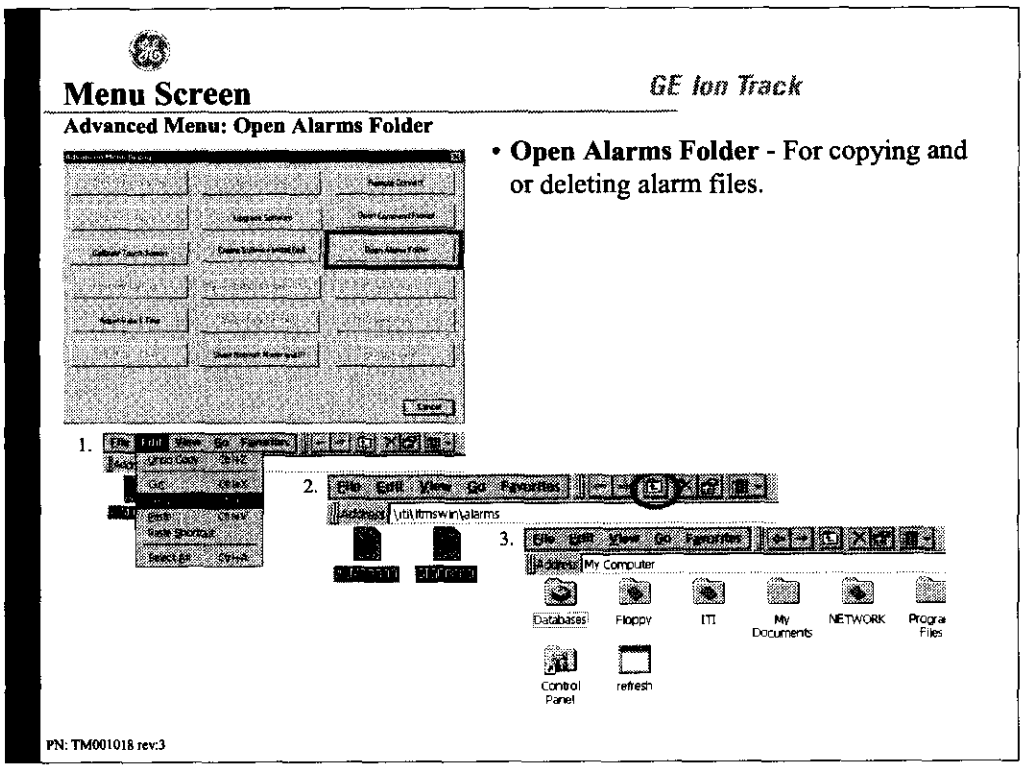
Create Software Install Disk - Creates a software install disk, which can be used for upgrading other systems or opening saved alarms on a desktop computer.

Show Network Name and IP – Displays a dialog box with the Host Name and the Itemiser3 IP address.



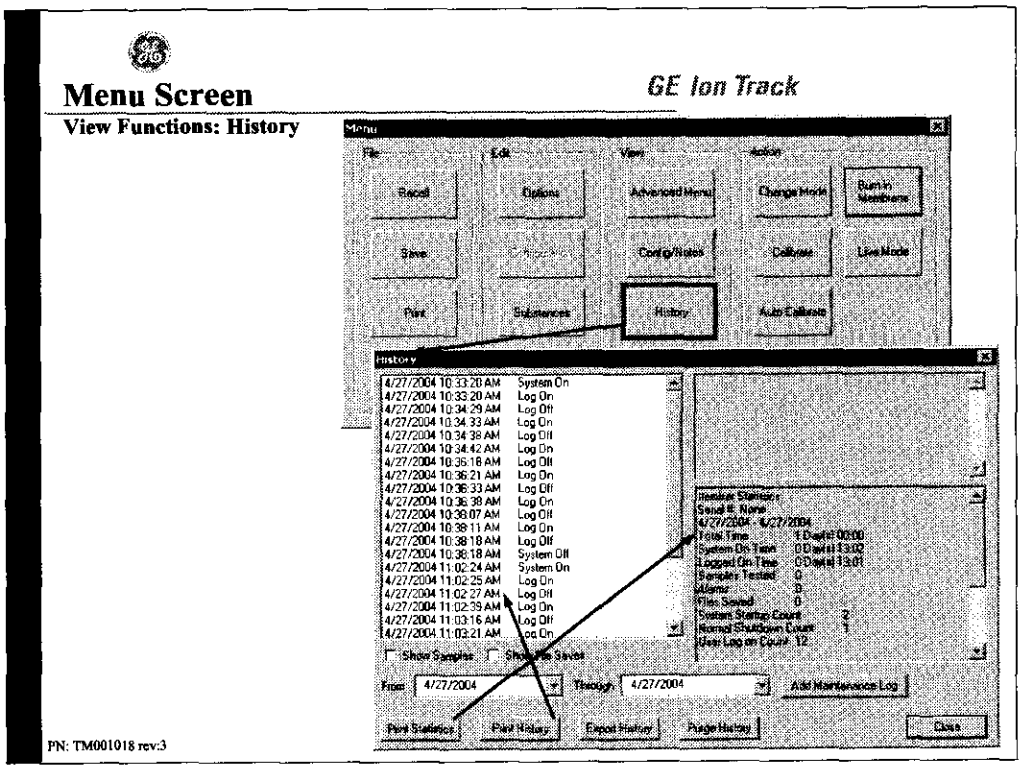
Remote Connect - Connect to a remote device through the IR port.

Open Command Prompt - Opens a command prompt window for advanced features, such as copying alarms over a network to a server.



Saving Alarm Files to Diskette

1. The Alarm Files folder can be quickly accessed at any time by pressing the Advanced menu, Open Alarms folder. From this Explorer window, select the desired files then choose <Edit>, then <Copy>.
2. To copy to a floppy press the yellow up folder button three times to get to "My Computer".
3. Insert a floppy disk, double click on the icon that says 'refresh', and a folder called "Floppy" will appear. Double click on the "Floppy" folder. Choose <File>, then <Paste> to paste the alarms to the floppy.



The Itemiser[3] System automatically records session information in a History file. This history file lists all mode changes, files saved, warnings issued, log on/off information, alarm occurrences, and manual and automatic calibrations performed. These history files can be accessed and copied to a diskette for further analysis.

The buttons, explained below, only work on the part of the history file covered by the From/Through Dates.

Print Statistics:

Prints the statistics displayed in the lower right window of the screen.

Print History:

Prints the history (shown in left side window) using the From/Through dates.

Export History:

Export History allows export of the history files to a PDA or laptop computer with Infrared Port capabilities or to a Network or File location. The file is exported as serial#.csv (the comma separated values format) which can be opened by any application that reads .csv files, such as Excel. The files also can be exported to a floppy drive, automatically at a specified time of day.

Note: The file time information will be saved as Pacific Time Zone but the data within the file will have the correct time information. This is a function of Windows CE.

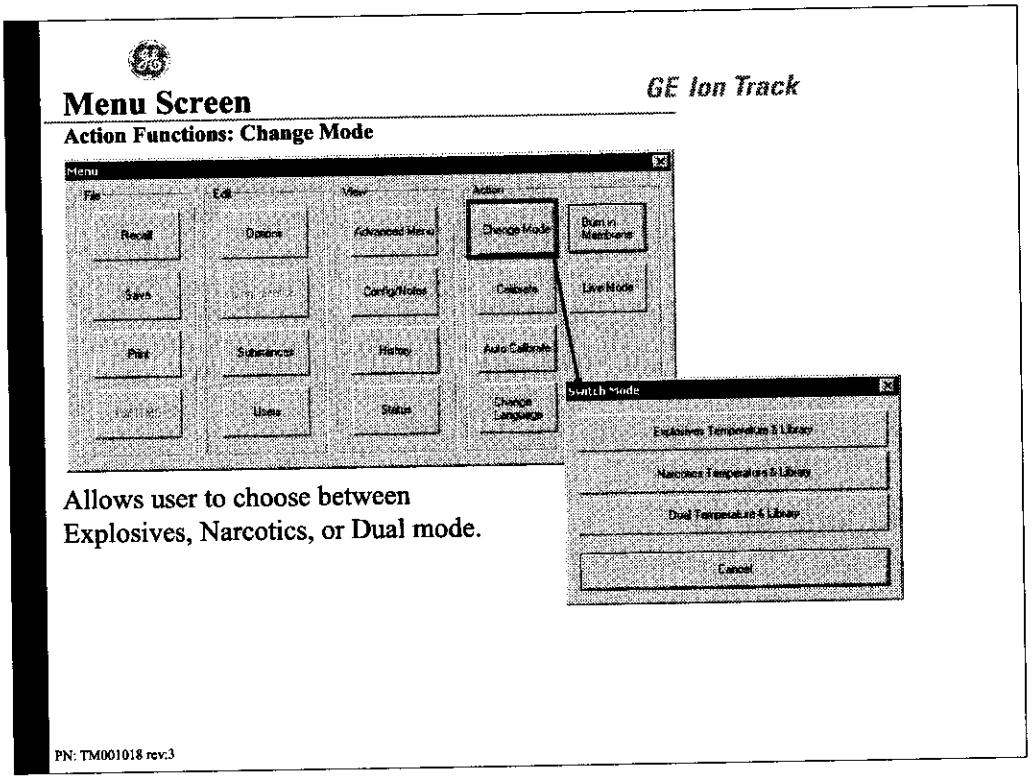
If your laptop computer or PDA is equipped with an Infrared Port, you can export the .csv file.

Purge History:

Clears the History record.

Add Maintenance log:

Allows the user to add maintenance notes to the history log.



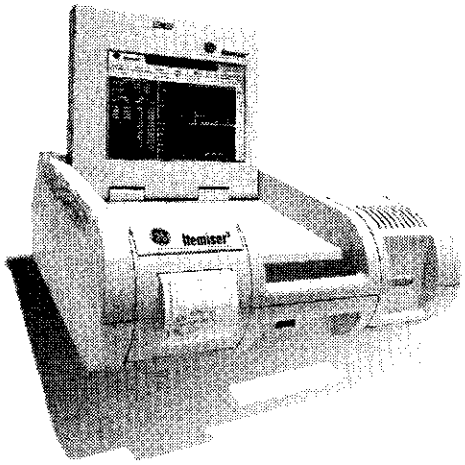
Optimizes the temperatures and substance library for increased sensitivity for target substances.

Dual mode selects intermediate temperatures to allow for detection of all selected substances.

Summary

GE Ion Track

- Logging On
- Menu Screens
  - » Edit Functions
    - Options
    - Configuration
    - Users
  - » View Functions
    - Advanced Menu Functions
    - History
  - » Action Functions
    - Change Mode



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FedCure FOIA Litigation

2005-03326

Cover Sheet

This Section Contains:

C. Information related to the training methods used for operators

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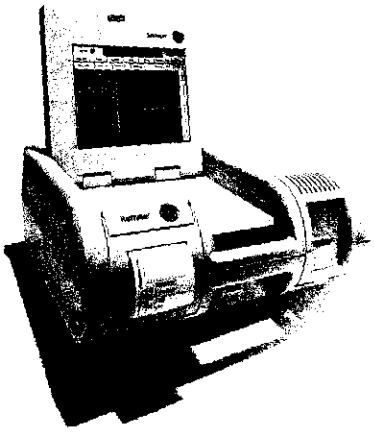
Location: FCI Englewood

Name and phone number of person conducting search:

K. Burton / S. Leyba

Itemiser^3



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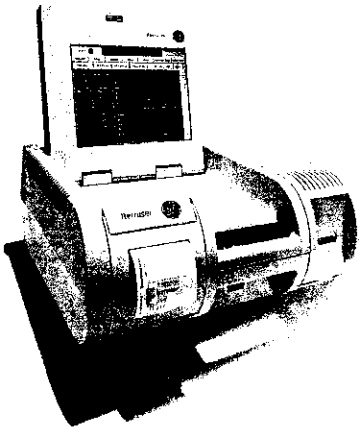
Itemiser³



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Preface

This is the GE *Itemiser³ Administrator Student Guide.* This document includes an overview of the product and detailed instructions explaining

- how to utilize Itemiser³ Administrator menu functions.

There is also information describing how to contact technical support if you have questions or concerns.

To use this document effectively, you should have the following minimum qualifications:

- Completed the Itemiser³ Operator + Maintenance courses.
- a basic knowledge of explosive and narcotic trace detection and
- a basic knowledge of your organization's alarm resolution protocols.

Read these instructions and all ancillary documentation entirely before installing or

operating this product. The most current versions of this and related documentation are available through GE Security Customer Service.

Conventions used in this document

The following conventions are used in this document:

Bold	Menu items and buttons.
Italic	Emphasis of an instruction or point; special terms.
	File names, path names, windows, panes, tabs, fields, variables, and other GUI elements.
	Titles of books and documents.
Blue italic	(Electronic version.) Hyperlinks to cross-references, related topics, and URL addresses.
Monospace	Text that displays on the screen.
	Programming or coding sequences.

Safety terms and symbols

These terms may appear in this manual:

General Warning: User should use care to avoid possible damage to equipment. This warning is accompanied by additional text information indicating the details of the warning.

Hot Surface Warning: User should use care when working near or on the labeled item.

High Voltage Warning: User should use appropriate electrical safety precautions.

Radiation Warning: Indicates the presence of a radioactive source

Warnings and cautions

The Itemiser Detector contains a radioactive nickel 63 source of 10 millicuries (370 MBq) strength. The source is fully enclosed in the detector of the instrument that stops all primary radiation. The detector has been designed in compliance with USNRC guidelines for safety. If a problem is suspected with the detector, DO NOT open the detector—call GE Security's Technical Service Department. Then, if instructed, return the instrument to GE for service. Note that in some countries, notification of receipt and registration of the source may be required by the national government body responsible for control of radioactive sources.

Note: Annual Radiation wipe test is NOT required for this instrument.

The detector must be disposed of properly in accordance with local, state, and federal (or National) regulations. Please contact your local hazardous waste disposal facility or GE Homeland Protection for proper disposal methods.

CAUTION: Do not position the unit so that it is difficult to operate the disconnecting device.

CAUTION: If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

Rear panel symbols

System Off:
Indicates the system is off.

System On:
Indicates the system is on.

COM Port:

Network

Keyboard

~	Alternating Current (AC): Indicates alternating current.
⎓	Direct Current (DC) Symbol
⊟	Fuse
▢	Monitor

Chapter 1 Menu Functions

This chapter instructs the Administrator user on the various menu functions:

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Adjust date & time 7
Upgrade software 8
Create software install disk 9
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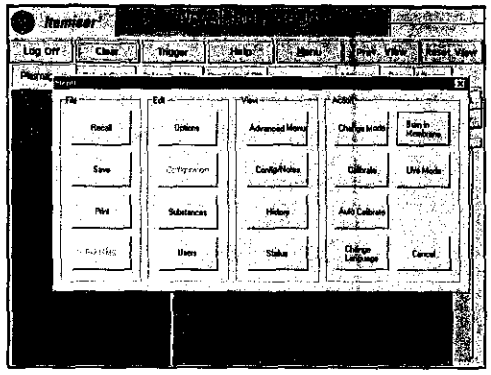
Open alarms folder 10

Administrator Menu

Figure 1. Administrator menu view



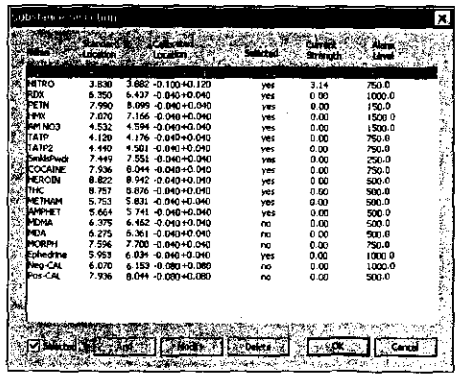
Substances

Displays the list of selected substances and their configuration.

- Select or deselect any substance by highlighting the name on the list.

- Press the checkbox in the lower left corner of the screen to select or deselect the substance
- Administrators do not have access to adding, modifying or deleting substances. These functions are available to superuser's only and should only be changed under the advisement of a GE Homeland Protection Applications Engineer.

Figure 2. Substances



Change mode

- Allows you to change detection modes (Dual, Explosives or Narcotics mode) depending on system configuration.
- Changing modes requires a stabilization period.

Explosives Temperature & Library

- When selecting the explosives-only, single-mode detection option, the Itemiser sets the detector temperature at 162°C and only the explosive substances are selected for analysis. You will see the split window in Plasmagram view because some substances, such as TATP1, TATP2, and Smokeless Powder will appear in the positive ion window even though they are explosives.

Narcotics Temperature & Library

- When selecting the narcotics-only, single-mode detection option, the Itemiser sets the detector temperature at 198°C and only the narcotics substances are selected for analysis. You will see the split window, but all narcotics will appear in the positive ion window.

Dual Temperature & Library

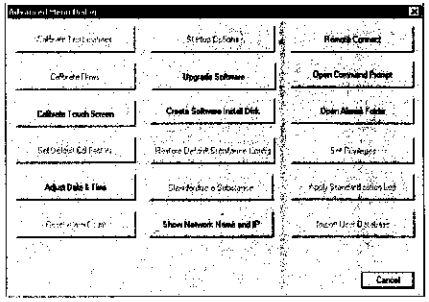
- When selecting the dual-mode detection option, the Itemiser sets the detector temperature at 183°C and both the explosives and narcotics substances are selected for analysis. For optimized detection of narcotics or explosives, it is recommended that the Itemiser be operated in explosives or narcotics single mode.

Users

- Allows you to add, modify and delete users at the Administrator level and below.

Advanced menu

Figure 3. Administrator advanced menu view



- Calibrate touchscreen
- Adjust date & time
- Upgrade software
- Create software install disk
- Show network name and IP
- Remote connect
- Open command prompt
- Open alarms folder

Calibrate touchscreen

1. Press **Calibrate touchscreen**.
2. Follow on-screen instructions to calibrate touchscreen.
3. Press and hold for a few seconds on each +.
4. Press **OK** to accept calibration.

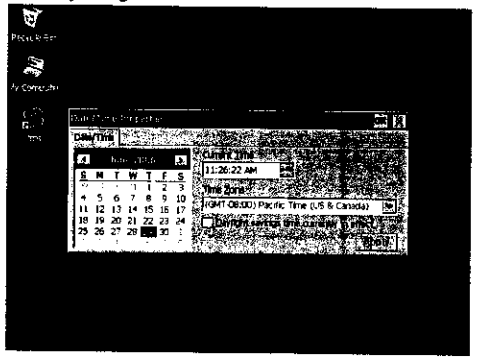
Adjust date & time

Sets the system date and time.

1. Press **Menu/Advanced Menu/Adjust date and time**.
2. System will exit the ITMS software to the desktop
3. Set local system date and time.
4. Press **OK** to accept changes.

Note: System displays a warning that prompts the user to exit the software to make this change. The dialog box also warns user not to adjust the Time Zone or Daylight Savings Time settings because they will not be saved.

Figure 4. Adjusting the date & time



Upgrade software

Upgrades the system software with the latest version from a diskette inserted into floppy drive on rear of instrument

1. Press **Menu/Advanced Menu**.
2. Insert a floppy disk into the floppy drive.
3. On the Advanced Menu Dialog, press **Upgrade Software** and follow the instructions on-screen to complete the upgrade.

Note: This process will exit you to the command prompt, please wait until the process is complete.

Create software install disk

Creates a software install disk, which can be used for upgrading other systems or opening saved alarms on a desktop computer.

1. Press **Menu/Advanced Menu**
2. On the Advanced menu dialog, press **Create Software Install Disk** and follow the instructions on-screen to complete the process.

Show network name & IP

Displays a dialog box with the Host Name and system IP address.

Remote connect

Connect to a remote device through the IR port.

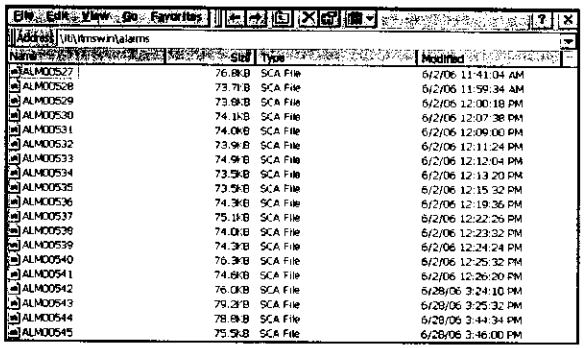
Open command prompt

Opens a command prompt window for advanced features, such as copying alarms over a network to a server.

Open alarms folder

For copying and deleting alarm files.

Figure 5. Opening alarm files folder



Chapter 2 Contact Information and Notes

This chapter provides contact information and a place to write notes:

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Contact Information

GE Homeland Protection 205 Lowell Street Wilmington, MA 01887 USA TEL: 800-433-5346 FAX: 866-249-9105	GE Homeland Protection Granary House, Station Rd. Great Shelford, Cambridge CB2 5LT United Kingdom TEL: +44 (0) 1223 728888 FAX: +44 (0) 1223 728889
GE Homeland Protection Unit 4, 9 Eden Park Drive Sydney Australia 2113 North Raid NSW AU Service.homeland@ge.com TEL: +61 2 9815 7900 FAX: +61 2 9889 7511	GE Homeland Protection Washington DC 1299 Pennsylvania Avenue Suite 100W Washington, DC 20004 USA TEL: 202-637-4000 FAX: 202-637-4232

GE Homeland Protection Customer Service USA TEL: 866-517-5580 from 8:30 a.m. to 5:00 p.m. (EST) UK TEL: +44 (0) 1223 728888 from 9:00 a.m. to 5:00 p.m. (GST) Australia TEL: +61 2 9815 7900 from 9:00 - 5:00 AEST	GE Homeland Protection Technical Service USA TEL: 877-877-1008 (24 hours a day) Service.homelandprotection.us@ge.com U.K. TEL: +44 (0) 1223 728888 from 9:00 a.m. to 5:00 p.m., GST Service.homelandprotection.uk@ge.com Australia TEL: +61 2 9815 7900 from 9:00 - 5:00 AEST Service.homeland@ge.com

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Cover Sheet

This Section Contains:

B. Documents identifying the number of Visitors turned away because of the scanning method

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Location: FCI Englewood

Name and phone number of person conducting search:

K. Burton / S. Leyba

Updated: April 11, 2008

HISTORY OF POSITIVE ION TESTS

VISITOR'S NAME	INMATE'S NAME	INMATE'S REG. NO	POSITIVE DATE	RETURN DATE	RESTRICTION LENGTH
[redacted]	(b)(6)		12-08-05	12-10-05	48 hours
			12-15-05	01-14-06	30 days
			01-05-06	01-07-06	48 hours
			03-18-06	03-20-06	48 hours
			05-18-07	05-20-07	48 hours

VISITOR'S NAME	INMATE'S NAME	INMATE'S REG. NO	POSITIVE DATE	RETURN DATE	RESTRICTION LENGTH
(b)(6)			12-15-06	12-18-06	48 hours
			05-26-07	05-28-07	48 hours
			02-02-08	02-04-08	48 hours
			03-21-08	03-23-08	48 hours
			03-28-08	03-30-08	48 hours**

VISITOR'S NAME	INMATE'S NAME	INMATE'S REG. NO	POSITIVE DATE	RETURN DATE	RESTRICTION LENGTH
[redacted]	(b)(6)	[redacted]	02-16-07	02-18-07	48 hours
			05-19-07	05-21-07	48 hours
			01-28-08	01-30-08	48 hours
			03-09-08	03-11-08	48 hours**
			03-14-08	04-14-08	48 hours**

VISITOR'S NAME	INMATE'S NAME	INMATE'S REG. NO	POSITIVE DATE	RETURN DATE	RESTRICTION LENGTH
(b)(6)			01-02-06	01-04-06	48 hours
			12-11-05	12-13-05	48 hours
			06-16-06	06-18-06	48 hours
			11-26-06	11-28-06	48 hours
			07-21-07	07-23-07	48 hours
			01-28-08	01-30-08	48 hours
			03-14-08	03-16-08	48 hours
			03-29-08	04-28-08	48 hours
			04-05-08	04-07-08	48 hours**

VISITOR'S NAME	INMATE'S NAME	INMATE'S REG. NO	POSITIVE DATE	RETURN DATE	RESTRICTION LENGTH
[redacted]			03-09-06	03-11-06	48 hours
			12-12-05	12-14-05	48 hours
			12-16-05	01-15-06	30 days
			03-05-06	03-07-06	48 hours
	(b)(6)		10-06-06	10-08-06	48 hours
			01-28-08	01-30-08	48 hours
			03-24-08	03-26-08	48 hours
			03-29-08	04-28-08	30 days**

VISITOR'S NAME	INMATE'S NAME	INMATE'S REG. NO	POSITIVE DATE	RETURN DATE	RESTRICTION LENGTH
[redacted]			03-13-06	03-15-06	48 hours
			02-03-08	02-05-08	48 hours**
	(b)(6)		02-03-08	02-05-08	48 hours**
			02-03-08	02-05-08	48 hours**

VISITOR'S NAME	INMATE'S NAME	INMATE'S REG. NO	POSITIVE DATE	RETURN DATE	RESTRICTION LENGTH
[redacted]	(b)(6)	[redacted]	11-23-06	11-25-06	48 hours **

VISITOR'S NAME	INMATE'S NAME	INMATE'S REG. NO	POSITIVE DATE	RETURN DATE	RESTRICTION LENGTH
[redacted]	(b)(6)		02-12-06	02-14-06	48 hours
			01-06-06	01-08-06	48 hours
			01-13-06	02-12-06	30 days
			12-11-05	12-13-05	48 hours
			11-12-06	11-14-06	48 hours
			12-01-06	12-03-06	48 hours
			07-13-07	07-15-07	48 hours
			03-16-08	03-18-08	48 hours
			03-22-08	03-24-08	48 hours**

VISITOR'S NAME	INMATE'S NAME	INMATE'S REG. NO	POSITIVE DATE	RETURN DATE	RESTRICTION LENGTH
[redacted]	(b)(6)		03-29-08	03-31-08	48 hours**
			03-29-08	03-31-08	48 hours**

VISITOR'S NAME	INMATE'S NAME	INMATE'S REG. NO	POSITIVE DATE	RETURN DATE	RESTRICTION LENGTH
(b)(6)			12-12-05	12-14-05	48 hours
			02-19-06	02-21-06	48 hours

VISITOR'S NAME	INMATE'S NAME	INMATE'S REG. NO	POSITIVE DATE	RETURN DATE	RESTRICTION LENGTH
[redacted]	(b)(6)	[redacted]	07-22-07	07-24-07	48 hours**

VISITOR'S NAME	INMATE'S NAME	INMATE'S REG. NO	POSITIVE DATE	RETURN DATE	RESTRICTION LENGTH
[redacted]			09-09-06	09-11-06	48 hours
	(b)(6)		10-01-06	10-03-06	48 hours
			07-21-07	07-23-07	48 hours**

VISITOR'S NAME	INMATE'S NAME	INMATE'S REG. NO	POSITIVE DATE	RETURN DATE	RESTRICTION LENGTH
[redacted]			01-25-06	01-27-06	48 hours
	(b)(6)		03-08-08	03-10-08	48 hours
			04-07-08	04-09-08	48 hours**

VISITOR'S NAME	INMATE'S NAME	INMATE'S REG. NO	POSITIVE DATE	RETURN DATE	RESTRICTION LENGTH
[redacted]	(b)(6)	[redacted]	05-11-07	05-13-07	48 hours**

VISITOR'S NAME	INMATE'S NAME	INMATE'S REG. NO	POSITIVE DATE	RETURN DATE	RESTRICTION LENGTH
[redacted]	(b)(6)	[redacted]	07-04-06	07-06-06	48 hours
			07-14-07	07-16-06	48 hours **

VISITOR'S NAME	INMATE'S NAME	INMATE'S REG. NO	POSITIVE DATE	RETURN DATE	RESTRICTION LENGTH
[redacted]	(b)(6)	[redacted]	01-02-06	01-04-06	48 hours
			06-18-06	06-20-06	48 hours

VISITOR'S NAME	INMATE'S NAME	INMATE'S REG. NO	POSITIVE DATE	RETURN DATE	RESTRICTION LENGTH
(b)(6)			03-31-08	04-02-08	48 hours**

FedCure FOIA Litigation

2005-03326

Cover Sheet

This Section Contains:

B. Documents identifying the number of Visitors turned away because of the scanning method

---

Location: FCI Englewood

Name and phone number of person conducting search:

K. Burton / S. Leyba

ION Spectrometry Device

Daily Testing Log

January

BP-S730.051 **ION SPECTROMETRY DEVICE DAILY TESTING LOG** CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE **FEDERAL BUREAU OF PRISONS**

Serial No.	Date	Random No.(s)
22647	1/28/08	5

Operator Name/Signature [redacted] (b)(7)c

NOTE: Positive Alarms Mus[redacted]LARM LOG"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
535	[redacted] (b)(6)			+	[redacted] (b)(7)c
600p				+	
618p				+	
638p				—	

(This form may be replicated via WP)

Sensitive - Limited Official Use only when completed

GE Security

GE Itemiser³

Weekly Maintenance Checklist

To be performed at END of last shift.

Be sure system is powered off and allowed to cool for 10 minutes before starting maintenance.
It is recommended to perform maintenance tasks in the order listed.

Completed	Procedure
✓	Check/Clean fan air filter
✓	Check Dopant level (1/8" (3 mm) minimum fluid)
✓	Remove Desorber, Locking Ring, and Nozzle
✓	Remove stainless filter
✓	Blow out Sample Air Line
✓	Reinstall/Replace stainless filter
✓	Clean/Inspect Membrane
✓	Clean/Reinstall Nozzle and Locking Ring
✓	Turn Unit ON. Allow system (temperature) to stabilize.
✓	Verify approx. 200 cc Sample flow on rear flow meter
✓	Verify approx. 200 cc Detector flow on rear flow meter
✓	Verify Nozzle flow (approximately 0.2 - 0.4 SCFH)
✓	Clean and reinstall desorber
✓	Check Printer Paper supply
✓	Check Sample Trap supply
✓	Check Calibration Trap supply
✓	Clean Workspace
✓	Clean Touchscreen
	Date: 1-4-08 Initials: (b)(7)c

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GE Security

GE Itemiser³

Weekly Maintenance Checklist

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✓	Clean/Reinstall Nozzle and Locking Ring
✓	Turn Unit ON. Allow system (temperature) to stabilize.
✓	Verify approx. 200 cc Sample flow on rear flow meter
✓	Verify approx. 200 cc Detector flow on rear flow meter
✓	Verify Nozzle flow (approximately 0.2 - 0.4 SCFH)
✓	Clean and reinstall desorber
✓	Check Printer Paper supply
✓	Check Sample Trap supply
✓	Check Calibration Trap supply
✓	Clean Workspace
✓	Clean Touchscreen
✓	Date: 1-11-08 Initials: (b)(7)c

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GE Security

GE Itemiser³

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✓	Remove stainless filter
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✓	Reinstall/Replace stainless filter
✓	Clean/Inspect Membrane
✓	Clean/Reinstall Nozzle and Locking Ring
✓	Turn Unit ON. Allow system (temperature) to stabilize.
✓	Verify approx. 200 cc Sample flow on rear flow meter
✓	Verify approx. 200 cc Detector flow on rear flow meter
✓	Verify Nozzle flow (approximately 0.2 - 0.4 SCFH)
✓	Clean and reinstall desorber
✓	Check Printer Paper supply
✓	Check Sample Trap supply
✓	Check Calibration Trap supply
✓	Clean Workspace
✓	Clean Touchscreen
✓	Date: 1-18-08 Initials (b)(7)c

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GE Security

GE Itemiser³

Weekly Maintenance Checklist

To be performed at END of last shift.

Be sure system is powered off and allowed to cool for 10 minutes before starting maintenance.
It is recommended to perform maintenance tasks in the order listed.

Completed	Procedure
✓	Check/Clean fan air filter
✓	Check Dopant level (1/8" [3 mm] minimum fluid)
✓	Remove Desorber, Locking Ring, and Nozzle
✓	Remove stainless filter
✓	Blow out Sample Air Line
✓	Reinstall/Replace stainless filter
✓	Clean/Inspect Membrane
✓	Clean/Reinstall Nozzle and Locking Ring
✓	**Turn Unit ON. Allow system (temperature) to stabilize.**
✓	Verify approx. 200 cc Sample flow on rear flow meter
✓	Verify approx. 200 cc Detector flow on rear flow meter
✓	Verify Nozzle flow (approximately 0.2 - 0.4 SCFH)
✓	Clean and reinstall desorber
✓	Check Printer Paper supply
✓	Check Sample Trap supply
✓	Check Calibration Trap supply
✓	Clean Workspace
✓	Clean Touchscreen
✓	Date: 1-25-08 Initia (b)(7)c

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GE Security

GE Itemiser

Monthly Maintenance Checklist

To be performed at END of last shift.

Be sure system is powered off and allowed to cool for 10 minutes before starting maintenance.
It is recommended to perform maintenance tasks in the order listed.

Completed	Procedure
✓	Check/Clean fan air filter
✓	Check Dopant level (1/8" [3 mm] minimum fluid)
✓	Remove Desorber, Locking Ring, and Nozzle
✓	Remove stainless filter
✓	Blow out Sample Air Line
✓	Reinstall/Replace stainless filter
✓	Replace Membrane
✓	Clean/Reinstall Nozzle and Locking Ring
✓	**Turn Unit ON. Allow system (temperature) to stabilize.**
✓	Verify approx. 200 cc Sample flow on rear flow meter
✓	Verify approx. 200 cc Detector flow on rear flow meter
✓	Verify Nozzle flow (approximately 0.2 - 0.4 SCFH)
✓	Clean and reinstall Desorber
✓	Check Printer Paper supply
✓	Check Sample Trap supply
✓	Check Calibration Trap supply
✓	Clean Workspace
✓	Clean Touchscreen
	Date: 1-31-08 Initials: (b)(7)c

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ION Spectrometry Device

Daily Testing Log

February

BP-S730.051 **ION SPECTROMETRY DEVICE DAILY TESTING LOG** CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE **FEDERAL BUREAU OF PRISONS**

Serial No. 22647	Date 2/11/08	Random No.(s) 7
Operator Name/Signature	(b)(7)c	

NOTE: Positive Alarms Must [redacted]

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
540	(b)(6)			Neg	(b)(7)c
630				Neg	

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BP-S730.051 **ION SPECTROMETRY DEVICE DAILY TESTING LOG** CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE **FEDERAL BUREAU OF PRISONS**

Serial No. 22647	Date Feb 10 2008	Random No.(s) 8
Operator Name/Signature [redacted] (b)(7)c		

NOTE: Positive Alarms Must ALSO Be Logged On "POSITIVE ALARM LOG"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
1132	[redacted] (b)(6)			Neg	
1245				Neg	
1258				Neg	
125				Blue	
125				Neg	
130				Neg	
206				Neg	

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BP-S730.051 **ION SPECTROMETRY DEVICE DAILY TESTING LOG** CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE **FEDERAL BUREAU OF PRISONS**

Serial No. 22647	Date 2/9/08	Random No.(s) 6
Operator Name/Signature [redacted]		

NOTE: Positive Alarms Must [redacted] RM LOG"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
900A	[redacted]			—	[redacted]
1145A				—	

(This form may be replicated via WP)

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BP-S730.051 **ION SPECTROMETRY DEVICE DAILY TESTING LOG** CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE **FEDERAL BUREAU OF PRISONS**

Serial No. 22647	Date 2/8/2008	Random No.(s) 9
Operator Name/Signature [redacted]		

NOTE: Positive Alarms Mus[redacted]

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
520	[redacted]			—	[redacted]
600				—	
610				—	
800				—	

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BP-S730.051 **ION SPECTROMETRY DEVICE DAILY TESTING LOG** CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE **FEDERAL BUREAU OF PRISONS**

Serial No.	Date	Random No.(s)
22647	2/4/08	8

Operator Name/Signature [redacted] (b)(7)c

NOTE: Positive Alarms Must Also Be Logged On "POSITIVE ALARM LOG"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
545p	[redacted] (b)(6)			—	[redacted] (b)(7)c
655p				—	
705p				—	

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BP-S730.051 **ION SPECTROMETRY DEVICE DAILY TESTING LOG** CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE **FEDERAL BUREAU OF PRISONS**

Serial No. 22647	Date 2/3/08	Random No.(s) 4
Operator Name/Signature (b)(7)c		

NOTE: Positive Alarms Must ALSO Be Logged On "POSITIVE ALARM LOG"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
900A	(b)(6)			–	(b)(7)c
1155A				–	
1210p				–	
1245				–	
124				–	
1255				+	
110p				+	
123p				+	
130				–	

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BP-S730.051 **ION SPECTROMETRY DEVICE DAILY TESTING LOG** CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE **FEDERAL BUREAU OF PRISONS**

Serial No.	Date	Random No.(s)
22647	2/2/08	6

Operator Name/Signature [redacted] (b)(7)c

NOTE: Positive Alarms Must ALSO Be Logged On "POSITIVE ALARM LOG"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
1118A	[redacted] (b)(6)			–	[redacted] (b)(7)c
1200p				+	
135p				–	

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BP-S730.051 **ION SPECTROMETRY DEVICE DAILY TESTING LOG** CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE **FEDERAL BUREAU OF PRISONS**

Serial No. 22647	Date 2/1/2008	Random No.(s) 10
Operator Name/Signature	[redacted] (b)(7)c	

NOTE: Positive Alarms Must [redacted] RM LOG"

Time	[redacted]	[redacted]	[redacted]	Result	Initials
530	[redacted] (b)(6)			—	[redacted] (b)(7)c
608p				—	
711p				—	

(This form may be replicated via WP)

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GE Security

GE Itemiser³

Weekly Maintenance Checklist

To be performed at END of last shift.

Be sure system is powered off and allowed to cool for 10 minutes before starting maintenance.
It is recommended to perform maintenance tasks in the order listed.

Completed	Procedure
✓	Check/Clean fan air filter
✓	Check Dopant level (1/8" (3 mm) minimum fluid)
✓	Remove Desorber, Locking Ring, and Nozzle
✓	Remove stainless filter
✓	Blow out Sample Air Line
✓	Reinstall/Replace stainless filter
✓	Clean/Inspect Membrane
✓	Clean/Reinstall Nozzle and Locking Ring
✓	**Turn Unit ON. Allow system (temperature) to stabilize.**
✓	Verify approx. 200 cc Sample flow on rear flow meter
✓	Verify approx. 200 cc Detector flow on rear flow meter
✓	Verify Nozzle flow (approximately 0.2 - 0.4 SCFH)
✓	Clean and reinstall desorber
✓	Check Printer Paper supply
✓	Check Sample Trap supply
✓	Check Calibration Trap supply
✓	Clean Workspace
✓	Clean Touchscreen
	Date: 9-8-08 Initials: (b)(7)c

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GE Security

GE Itemiser³

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✓	Clean/Reinstall Nozzle and Locking Ring
✓	**Turn Unit ON. Allow system (temperature) to stabilize.**
✓	Verify approx. 200 cc Sample flow on rear flow meter
✓	Verify approx. 200 cc Detector flow on rear flow meter
✓	Verify Nozzle flow (approximately 0.2 - 0.4 SCFH)
✓	Clean and reinstall desorber
✓	Check Printer Paper supply
✓	Check Sample Trap supply
✓	Check Calibration Trap supply
✓	Clean Workspace
✓	Clean Touchscreen
	Date: 2-15-08 Initials: (b)(7)c

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GE Security

GE Itemiser³

Weekly Maintenance Checklist

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✓	Verify Nozzle flow (approximately 0.2 - 0.4 SCFH)
✓	Clean and reinstall desorber
✓	Check Printer Paper supply
✓	Check Sample Trap supply
✓	Check Calibration Trap supply
✓	Clean Workspace
✓	Clean Touchscreen
	Date: 9-22-08 Initials: (b)(7)c

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GE Security

GE Itemiser

Monthly Maintenance Checklist

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✓	Verify Nozzle flow (approximately 0.2 - 0.4 SCFH)
✓	Clean and reinstall Desorber
✓	Check Printer Paper supply
✓	Check Sample Trap supply
✓	Check Calibration Trap supply
✓	Clean Workspace
✓	Clean Touchscreen
	Date: 1-29-08 Initials: (b)(7)c

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ION Spectrometry Device

Daily Testing Log

March

BP-S730.051 ION SPECTROMETRY DEVICE DAILY TESTING LOG CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE FEDERAL BUREAU OF PRISONS

Serial No.	Date	Random No.(s)
22647	3/31/08	6th

Operator Name/Signature [redacted]

NOTE: Positive Alarms Mu[redacted]RM LOG"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
510p	[redacted]	[redacted]	[redacted]	POS	[redacted]
531p	[redacted]	[redacted]	[redacted]	NEG	[redacted]
603p	[redacted]	[redacted]	[redacted]	NEG	[redacted]
701p	[redacted]	[redacted]	[redacted]	NEG	[redacted]
719p	[redacted]	[redacted]	[redacted]	POS	[redacted]
718p	[redacted]	[redacted]	[redacted]	NEG	[redacted]

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BP-S730.051 ION SPECTROMETRY DEVICE DAILY TESTING LOG CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE FEDERAL BUREAU OF PRISONS

Serial No.	Date	Random No.(s)
22647	3/30/08	Skip 3 do 2

Operator Name/Signature [redacted] (b)(7)c

NOTE: Positive Alarms Must ALSO Be Logged On "POSITIVE ALARM LOG"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
845A	[redacted]	[redacted]	[redacted]	neg	[redacted]
850A				neg	
855A				neg	
900A				neg	
905A				neg	
1130A				neg	
1145A				neg	
1235p				neg	
115p				neg	
127p				neg	
140p				neg	
145p				neg	

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BP-S730.051 ION SPECTROMETRY DEVICE DAILY TESTING LOG CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE FEDERAL BUREAU OF PRISONS

Serial No. 22647	Date 3/29/08	Random No. (s) every 7th person
Operator Name/Signature [redacted]		

NOTE: Positive Alarms Mus[redacted] ALARM LOG"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
0845	[redacted]	[redacted]	[redacted]	–	[redacted]
847				–	
915pm				+	
1110A				+	
1215				–	
1250				+	
1308				+	

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BP-S730.051 ION SPECTROMETRY DEVICE DAILY TESTING LOG CDFRM
FEB 05
U.S. DEPARTMENT OF JUSTICE FEDERAL BUREAU OF PRISONS

Serial No.	Date	Random No.(s)
22647	3/28/08	6

Operator Name/Signatur [redacted] (b)(7)c

NOTE: Positive Alarms Must ALSO Be Logged On "POSITIVE ALARM LOG"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
510p	[redacted]	[redacted]	[redacted]	—	[redacted]
520p	[redacted]	[redacted]	[redacted]	—	[redacted]
525p	[redacted]	[redacted]	[redacted]	—	[redacted]
540p	[redacted]	[redacted]	[redacted]	—	[redacted]
545p	[redacted]	[redacted]	[redacted]	NEG	[redacted]
555	[redacted]	[redacted]	[redacted]	+	[redacted]
608p	[redacted]	[redacted]	[redacted]	—	[redacted]
628p	[redacted]	[redacted]	[redacted]	—	[redacted]
635p	[redacted]	[redacted]	[redacted]	—	[redacted]
650p	[redacted]	[redacted]	[redacted]	—	[redacted]
57p	[redacted]	[redacted]	[redacted]	—	[redacted]
725p	[redacted]	[redacted]	[redacted]	—	[redacted]

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BP-S730.051 ION SPECTROMETRY DEVICE DAILY TESTING LOG CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE FEDERAL BUREAU OF PRISONS

Serial No.	Date	Random No.(s)
22647	3/24/08	6th

Operator Name/Signature [redacted] (b)(7)c

NOTE: Positive Alarms Mus[redacted]RM LOG"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
515p	[redacted] (b)(6)	[redacted]	[redacted]	NEG	[redacted] (b)(7)c
535p				NEG	
620p				POS	

(This form may be replicated via WP)

Sensitive - Limited Official Use only when completed

BP-S730.051 ION SPECTROMETRY DEVICE DAILY TESTING LOG CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE FEDERAL BUREAU OF PRISONS

Serial No.	Date	Random No.(s)
22647	3/23/08	5

Operator Name [redacted] (b)(7)c

NOTE: Positive [redacted]

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
846	[redacted]	[redacted]	[redacted]	—	[redacted]
900				—	
906				—	
911				—	
916				—	
925				—	
1110				—	
1115				—	
1150				—	
1215				—	
235				—	
N/A				N/A	
145p				—	
145p				—	

(b)(6)

(This form may be replicated via WP)

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BP-S730.051 ION SPECTROMETRY DEVICE DAILY TESTING LOG CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE FEDERAL BUREAU OF PRISONS

Serial No.	Date	Random No.(s)
22647	3/22/08	5

Operator Name/Signatur [redacted] (b)(7)c

NOTE: Positive Alarms Must ALSO Be Logged On "POSITIVE ALARM LOG"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
840A	[redacted] (b)(6)			—	[redacted] (b)(7)c
850A				—	
900A				—	
905A				—	
915A				—	
925A				—	
1125				—	
1145				—	
1200				—	
1220				+	
1230				—	
1230				—	
140p				—	
150				—	
200				—	

[redacted] (b)(7)c

(This form may be replicated via WP)

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BP-S730.051 ION SPECTROMETRY DEVICE DAILY TESTING LOG CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE FEDERAL BUREAU OF PRISONS

Serial No.	Date	Random No.(s)
22647	3/24/08	6

Operator Name/Signature [redacted] (b)(7)c

NOTE: Positive Alarms Must ALSO Be Logged On "POSITIVE ALARM LOG"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
515	[redacted]	[redacted]	[redacted]	–	[redacted]
527				–	
544				–	
555		(b)(6)		–	(b)(7)c
605p				–	
707p				–	
707p				+	

(This form may be replicated via WP)

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BP-S730.051 **ION SPECTROMETRY DEVICE DAILY TESTING LOG** CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE **FEDERAL BUREAU OF PRISONS**

Serial No. 22647	Date 3/16/08	Random No.(s) 6
Operator Name/Signature [redacted]		

NOTE: Positive Alarms Mu[redacted]RM LOG"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
910A	[redacted]	[redacted]	[redacted]	—	[redacted]
1105A	[redacted]	[redacted]	[redacted]	—	[redacted]
1155A	[redacted]	[redacted]	[redacted]	—	[redacted]
1215P	[redacted]	[redacted]	[redacted]	—	[redacted]
100P	[redacted]	[redacted]	[redacted]	+	[redacted]

(This form may be replicated via WP)

Sensitive - Limited Official Use only when completed

BP-S730.051 ION SPECTROMETRY DEVICE DAILY TESTING LOG CDFRM
FEB 05
U.S. DEPARTMENT OF JUSTICE FEDERAL BUREAU OF PRISONS

Serial No. 22647	Date 3/15/08	Random No.(s) 7
Operator Name/Signature [redacted]		

NOTE: Positive Alarms Mus[redacted]G"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
900A	[redacted]			—	[redacted]
1103A				—	
115p				—	
205p				—	

(This form may be replicated via WP)

Sensitive - Limited Official Use only when completed

BP-S730.051 ION SPECTROMETRY DEVICE DAILY TESTING LOG CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE FEDERAL BUREAU OF PRISONS

Serial No.	Date	Random No.(s)
22647	3/14/08	7

Operator Name/Signature [redacted] (b)(7)c

NOTE: Positive Alarms Must [redacted] ALARM LOG"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
515p	[redacted] (b)(6)			—	[redacted] (b)(7)c
530p				+	
545p				—	
640p				—	
705p				—	
750p				+	

(This form may be replicated via WP)

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BP-S730.051 ION SPECTROMETRY DEVICE DAILY TESTING LOG CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE FEDERAL BUREAU OF PRISONS

Serial No.	Date	Random No.(s)
22647	3-10-08	6

Operator Name/Sig [redacted] (b)(7)c

NOTE: Positive Alarms Must ALSO Be Logged On "POSITIVE ALARM LOG"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
545	[redacted]	[redacted]	[redacted]	Neg	[redacted]
600	[redacted]	[redacted]	[redacted]	Neg	[redacted]
637	[redacted]	[redacted]	[redacted]	Positive	[redacted]

(This form may be replicated via WP)

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BP-S730.051 ION SPECTROMETRY DEVICE DAILY TESTING LOG CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE FEDERAL BUREAU OF PRISONS

Serial No. 22647	Date 3/9/2008	Random No. (s) 8
Operator Name/Signature [redacted]		

NOTE: Positive Alarms Must ALSO Be Logged On "POSITIVE ALARM LOG"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
900A	[redacted]			—	[redacted]
1135A				+	
1220p				—	
1225p				—	
115p				—	
130p				—	

(This form may be replicated via WP)

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BP-S730.051 ION SPECTROMETRY DEVICE DAILY TESTING LOG CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE FEDERAL BUREAU OF PRISONS

Serial No.	Date	Random No.(s)
22647	3/8/2008	10th Adult

Operator Name/Signature [redacted] (b)(7)c

NOTE: Positive Alarms Mu[redacted]M LOG"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
920A	[redacted] (b)(6)			–	[redacted] (b)(7)c
1200p				+	
125p				–	

(This form may be replicated via WP)

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BP-S730.051 ION SPECTROMETRY DEVICE DAILY TESTING LOG CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE FEDERAL BUREAU OF PRISONS

Serial No. 22647	Date 3/7/2008	Random No.(s) 7
Operator Name/Signature [redacted] (b)(7)c		

NOTE: Positive Alarms Must ALSO Be Logged On "POSITIVE ALARM LOG"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
515p	[redacted] (b)(6)			—	[redacted] (b)(7)c
530p				—	
535p				—	
615p				—	

(This form may be replicated via WP)

Sensitive - Limited Official Use only when completed

GE Security

GE Itemiser³

Weekly Maintenance Checklist

To be performed at END of last shift.

Be sure system is powered off and allowed to cool for 10 minutes before starting maintenance.
It is recommended to perform maintenance tasks in the order listed.

Completed	Procedure
✓	Check/Clean fan air filter
✓	Check Dopant level (1/8" (3 mm) minimum fluid)
✓	Remove Desorber, Locking Ring, and Nozzle
✓	Remove stainless filter
✓	Blow out Sample Air Line
✓	Reinstall/Replace stainless filter
✓	Clean/Inspect Membrane
✓	Clean/Reinstall Nozzle and Locking Ring
✓	Turn Unit ON. Allow system (temperature) to stabilize.
✓	Verify approx. 200 cc Sample flow on rear flow meter
✓	Verify approx. 200 cc Detector flow on rear flow meter
✓	Verify Nozzle flow (approximately 0.2 - 0.4 SCFH)
✓	Clean and reinstall desorber
✓	Check Printer Paper supply
✓	Check Sample Trap supply
✓	Check Calibration Trap supply
✓	Clean Workspace
✓	Clean Touchscreen
	Date: 3-7-08 Initials: (b)(7)c

GE Security, 205 Lowell Street, Wilmington, MA 01887 TEL: 978-658-3767 FAX: 978-657-5954
Granery House Station Rd Great Shelford, Cambridge CB2 5LT UK TEL: +44 (0) 1223 72888 FAX: +44 (0) 1223 72889

GE Security

GE Itemiser³

Weekly Maintenance Checklist

To be performed at END of last shift.

Be sure system is powered off and allowed to cool for 10 minutes before starting maintenance.
It is recommended to perform maintenance tasks in the order listed.

Completed	Procedure
✓	Check/Clean fan air filter
✓	Check Dopant level (1/8" (3 mm) minimum fluid)
✓	Remove Desorber, Locking Ring, and Nozzle
✓	Remove stainless filter
✓	Blow out Sample Air Line
✓	Reinstall/Replace stainless filter
✓	Clean/Inspect Membrane
✓	Clean/Reinstall Nozzle and Locking Ring
✓	**Turn Unit ON. Allow system (temperature) to stabilize.**
✓	Verify approx. 200 cc Sample flow on rear flow meter
✓	Verify approx. 200 cc Detector flow on rear flow meter
✓	Verify Nozzle flow (approximately 0.2 - 0.4 SCFH)
✓	Clean and reinstall desorber
✓	Check Printer Paper supply
✓	Check Sample Trap supply
✓	Check Calibration Trap supply
✓	Clean Workspace
✓	Clean Touchscreen
	Date: 3-14-08 Initials: (b)(7)c

GE Security, 205 Lowell Street, Wilmington, MA 01887 TEL: 978-658-3767 FAX: 978-657-5954
Granery House Station Rd Great Shelford, Cambridge CB2 5LT UK TEL: +44 (0) 1223 72888 FAX: +44 (0) 1223 72889

GE Security

GE Itemiser[3]

Weekly Maintenance Checklist

To be performed at END of last shift.

Be sure system is powered off and allowed to cool for 10 minutes before starting maintenance.
It is recommended to perform maintenance tasks in the order listed.

Completed	Procedure
✓	Check/Clean fan air filter
✓	Check Dopant level (1/8" [3 mm] minimum fluid)
✓	Remove Desorber, Locking Ring, and Nozzle
✓	Remove stainless filter
✓	Blow out Sample Air Line
✓	Reinstall/Replace stainless filter
✓	Clean/Inspect Membrane
✓	Clean/Reinstall Nozzle and Locking Ring
✓	Turn Unit ON. Allow system (temperature) to stabilize.
✓	Verify approx. 200 cc Sample flow on rear flow meter
✓	Verify approx. 200 cc Detector flow on rear flow meter
✓	Verify Nozzle flow (approximately 0.2 - 0.4 SCFH)
✓	Clean and reinstall desorber
✓	Check Printer Paper supply
✓	Check Sample Trap supply
✓	Check Calibration Trap supply
✓	Clean Workspace
✓	Clean Touchscreen
	Date: 3-21-08 Initials: (b)(7)c

GE Security, 205 Lowell Street, Wilmington, MA 01887 TEL: 978-658-3767 FAX: 978-657-5954
Granery House Station Rd Great Shelford, Cambridge CB2 5LT UK TEL: +44 (0) 1223 72888 FAX: +44 (0) 1223 72889

GE Security

GE Itemiser

Monthly Maintenance Checklist

To be performed at END of last shift.

Be sure system is powered off and allowed to cool for 10 minutes before starting maintenance.
It is recommended to perform maintenance tasks in the order listed.

Completed	Procedure
✓	Check/Clean fan air filter
✓	Check Dopant level (1/8" [3 mm] minimum fluid)
✓	Remove Desorber, Locking Ring, and Nozzle
✓	Remove stainless filter
✓	Blow out Sample Air Line
✓	Reinstall/Replace stainless filter
✓	Replace Membrane
✓	Clean/Reinstall Nozzle and Locking Ring
✓	**Turn Unit ON. Allow system (temperature) to stabilize.**
✓	Verify approx. 200 cc Sample flow on rear flow meter
✓	Verify approx. 200 cc Detector flow on rear flow meter
✓	Verify Nozzle flow (approximately 0.2 - 0.4 SCFH)
✓	Clean and reinstall Desorber
✓	Check Printer Paper supply
✓	Check Sample Trap supply
✓	Check Calibration Trap supply
✓	Clean Workspace
✓	Clean Touchscreen
	Date: 3-28-08 Initials: (b)(7)c

GE Security, 205 Lowell Street, Wilmington, MA 01887 TEL: 978-658-3767 FAX: 978-657-5954
Granery House Station Rd Great Shelford, Cambridge CB2 5LT UK TEL: +44 (0) 1223 72888 FAX: +44 (0) 1223 72889

From: (b)(7)c
To:
Date: 7/22/2008 9:35 AM
Subject: Re: itemizer

GE Security, shipped the Itemizer on March 31, 2008. It was received at FCI Englewood on April 1, 2008.

>>> (b)(7)c /17/2008 7:27 AM >>>
Can you tell me again what date we recieved this equipment back from repair?

ION Spectrometry Device

Daily Testing Log

April

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Use of Ion Spectrometry Equipment Suspended

On April 10, 2008, Assistant Directors Joyce K. Conley, CPD, and Thomas R. Kane, IPPA, issued a joint memorandum to all BOP CEOs advising that the use of any ion spectrometry drug detection equipment has been suspended effective immediately Bureau-wide due to problems with the machines' software. The manufacturers have been asked to make all necessary corrections/modifications. After the problems have been fixed and confirmed by the BOP's Office of Security Technology, CEOs will be contacted with respect to bringing the equipment back online. Until further notice, institutions will retain all ion spectrometry drug detection equipment and all relevant documentation.

In those cases where a visitor's visiting privileges are currently suspended as a result of the use of ion spectrometry drug detection equipment, the visitor may request the Warden consider reinstatement of visiting privileges, and/or an inmate can make requests for reinstatement of visiting privileges for such a visitor directly to unit staff. Inmates are to be informed via normal staff-to-inmate communications channels (e.g., town hall meetings) that they can make such requests. Talking points are available for staff use with inmates or visitors and for posting notices to inmates.

Appropriate staff will review each request from an inmate or a visitor and make a written recommendation to the Warden as to whether privileges should be reinstated. Visiting privileges should not be reinstated in those cases where the use of ion spectrometry drug detection equipment ***was not*** the basis for the suspension (e.g., the suspension is based instead on inappropriate behavior in the visiting room).

Additionally, at this time, ion spectrometry drug detection devices **may not** be used to test for the presence of illegal substances on inmates, on inmates' personal belongings, in housing units, or in work areas.

Date last updated: 04-14-2008

BP-S730.051 ION SPECTROMETRY DEVICE DAILY TESTING LOG CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE FEDERAL BUREAU OF PRISONS

Serial No.	Date	Random No. (s)
22647	4/7/08	Skip 4 do 2

Operator Name/Signature [redacted] (b)(7)c

NOTE: Positive Alarms Mus[redacted]VE ALARM LOG"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
510	[redacted] (b)(6)	[redacted]	[redacted]	—	[redacted] (b)(7)c
515				+	
530				—	
540				—	
610p				—	
705p				—	

(This form may be replicated via WP)

Sensitive - Limited Official Use only when completed

BP-S730.051 ION SPECTROMETRY DEVICE DAILY TESTING LOG CDFRM
FEB 05
U.S. DEPARTMENT OF JUSTICE FEDERAL BUREAU OF PRISONS

Serial No.	Date	Random No.(s)
22647	4/6/08	Skips 002

Operator Name/Signatur[redacted] (b)(7)c

NOTE: Positive Alarms Must ALSO Be Logged On "POSITIVE ALARM LOG"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
917	[redacted]	[redacted]	[redacted]	NEG	[redacted]
920				NEG	
922				NEG	
1132				NEG	
1219p				NEG	
135p				NEG	
125p		(b)(6)		NEG	(b)(7)c
113p				NEG	
113p				NEG	
135p				NEG	
135p				NEG	
230p				NEG	
236				NEG	

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BP-S730.051 ION SPECTROMETRY DEVICE DAILY TESTING LOG CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE FEDERAL BUREAU OF PRISONS

Serial No.	Date	Random No. (s)
22647	4/5/08	6TH PER OPS

Operator Name/Signature [redacted] (b)(7)c

NOTE: Positive Alarms Mu[redacted]RM LOG"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
856A	[redacted]	[redacted]	[redacted]	NEG	[redacted]
948A	[redacted]	[redacted]	[redacted]	NEG	[redacted]
1121A	[redacted]	[redacted]	[redacted]	NEG	[redacted]
1205P	[redacted]	[redacted]	[redacted]	NEG	[redacted]
156P	[redacted]	[redacted]	[redacted]	POS	[redacted]
159P	[redacted]	[redacted]	[redacted]	NEG	[redacted]

(This form may be replicated via WP)

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BP-S730.051 **ION SPECTROMETRY DEVICE DAILY TESTING LOG** CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE **FEDERAL BUREAU OF PRISONS**

Serial No.	Date	Random No.(s)
22647	4/4/08	Skip 5 do 2

Operator Name/Signatu[redacted] (b)(7)c

NOTE: Positive Alarms Must ALSO Be Logged On "POSITIVE ALARM LOG"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
520p	[redacted] (b)(6)			—	[redacted] (b)(7)c
530p				—	
528				—	
540				—	
545				—	
600				—	
605				—	
610				—	
715p				—	

(This form may be replicated via WP)

Sensitive - Limited Official Use only when completed

ION Spectrometry Device

Daily Testing Log

May

ION Spectrometry Device

Daily Testing Log

June

ION Spectrometry Device

Daily Testing Log

July

ION Spectrometry Device

Daily Testing Log

August

ION Spectrometry Device

Daily Testing Log

September

ION Spectrometry Device

Daily Testing Log

October

ION Spectrometry Device

Daily Testing Log

November

BP-S730.051 **ION SPECTROMETRY DEVICE DAILY TESTING LOG** CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE **FEDERAL BUREAU OF PRISONS**

Serial No. 20617	Date 11-26-04	Random No.(s) 6
Operato [redacted] (b)(7)c		

NOTE: Positive Alarms Must Also Be Logged On "POSITIVE ALARM LOG"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
912A	[redacted] (b)(6)	[redacted]	[redacted]	NEG	[redacted] (b)(7)c
1115A				NEG	
1151A				NEG	
1224P				NEG	
1225P				POS	
105P				NEG	
227P				NEG	

(This form may be replicated via WP)

Sensitive - Limited Official Use only when completed

BP-S730.051 **ION SPECTROMETRY DEVICE DAILY TESTING LOG** CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE **FEDERAL BUREAU OF PRISONS**

Serial No. 20617	Date 11-19-06	Random No. (s) 2 8
Operator Name/Signature [redacted]		

NOTE: Positive Alarms Mus[redacted]

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
845	[redacted]			Neg	[redacted]
910				Neg	
930				Pos	
935				Neg	
1110				Neg	
1130				Neg	
1240				Neg	
215				Neg	

(This form may be replicated via WP)

Sensitive - Limited Official Use only when completed

BP-S730.051 **ION SPECTROMETRY DEVICE DAILY TESTING LOG** CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE **FEDERAL BUREAU OF PRISONS**

Serial No.	Date 11-18-06	Random No. (s) 3 & 7
Operator Name/Signature	[redacted]	

NOTE: Positive Alarms Mu[redacted]

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
845A	[redacted]			None	[redacted]
855				None	
900				None	
915				None	
1115				None	
1147				None	
1155				None	
1233				None	
140				None	

(This form may be replicated via WP)

Sensitive - Limited Official Use only when completed

BP-S730.051 **ION SPECTROMETRY DEVICE DAILY TESTING LOG** CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE **FEDERAL BUREAU OF PRISONS**

Serial No. 28617	Date 11-17-06	Random No. (s) 5
Operator Name/Signatur [redacted]		

NOTE: Positive Alarms [redacted]

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
510p	[redacted]	[redacted]	[redacted]	Neg	[redacted]
511p	[redacted]	[redacted]	[redacted]	Neg	[redacted]
513p	[redacted]	[redacted]	[redacted]	Neg	[redacted]
600	[redacted]	[redacted]	[redacted]	Neg	[redacted]
615	[redacted]	[redacted]	[redacted]	Neg	[redacted]
730	[redacted]	[redacted]	[redacted]	Neg	[redacted]
735	[redacted]	[redacted]	[redacted]	Neg	[redacted]

(This form may be replicated via WP)

Sensitive - Limited Official Use only when completed

BP-S730.051 **ION SPECTROMETRY DEVICE DAILY TESTING LOG** CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE **FEDERAL BUREAU OF PRISONS**

Serial No. 20617	Date 11-12-06	Random No.(s) 7
Operator Name/Signature	(b)(7)c	

NOTE: Positive Alarms Must ALSO Be Logged On "POSITIVE ALARM LOG"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
930AM	(b)(6)			Neg	(b)(7)c
930AM				Neg	
1100AM				Neg	
115A				Neg	
1155A				Neg	
241P				Neg	
250P				Pos	
115P				Neg	
212P				Neg	

(This form may be replicated via WP)

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BP-S730.051 **ION SPECTROMETRY DEVICE DAILY TESTING LOG** CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE **FEDERAL BUREAU OF PRISONS**

Serial No. 20617	Date 11-11-06	Random No. (s) 7
Opera [redacted]		

NOTE: [redacted] On "POSITIVE ALARM LOG"

Time	Visitor Name	Inmate Name	Req. No.	Result	Initials
1135	[redacted]	[redacted]	057	Neg	[redacted]
1226			-013	Neg	
1242			-013	Neg	

(This form may be replicated via WP)

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BP-S730.051 **ION SPECTROMETRY DEVICE DAILY TESTING LOG** CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE **FEDERAL BUREAU OF PRISONS**

Serial No. 20617	Date 11-25-06	Random No.(s) 6
Operator Name/Signature	[redacted] (b)(7)c	

NOTE: Positive Alarms Must ALSO Be Logged On "POSITIVE ALARM LOG"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
0850	[redacted] (b)(6)			Neg	[redacted] (b)(7)c
1128				Neg	
1225				Neg	
1240				Neg	
1255				Neg	
1320				Neg	
1404				Neg	
1435				Neg	

(This form may be replicated via WP)

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BP-S730.051 **ION SPECTROMETRY DEVICE DAILY TESTING LOG** CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE **FEDERAL BUREAU OF PRISONS**

Serial No.	Date 11-24-06	Random No.(s) 7
Operator Name/Signature		

NOTE: Positive Alarms Must ALSO Be Logged On "POSITIVE ALARM LOG"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
0900	[redacted]	[redacted]	[redacted]	Neg	[redacted]
1100	[redacted]	[redacted]	[redacted]	Neg	[redacted]
1310	[redacted]	[redacted]	[redacted]	Neg	[redacted]
1405	[redacted]	[redacted]	[redacted]	Neg	[redacted]

(This form may be replicated via WP)

Sensitive - Limited Official Use only when completed

BP-S730.051 **ION SPECTROMETRY DEVICE DAILY TESTING LOG** CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE **FEDERAL BUREAU OF PRISONS**

Serial No. 20617	Date 11-23-06	Random No.(s) 7
Operator Name/Signatur (b)(7)c		

NOTE: Positive Alarms Must ALSO Be Logged On "POSITIVE ALARM LOG"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
830	(b)(6)			Neg	(b)(7)c
835				Neg	
840				Neg	
845				Neg	
900				Neg	
1135				Positive	
—					
1250				Neg	

(This form may be replicated via WP)

Sensitive - Limited Official Use only when completed

GE Security

GE Itemiser³

Weekly Maintenance Checklist

To be performed at END of last shift.

Be sure system is powered off and allowed to cool for 10 minutes before starting maintenance.
It is recommended to perform maintenance tasks in the order listed.

Completed	Procedure
✓	Check/Clean fan air filter
✓	Check Dopant level (1/8" (3 mm) minimum fluid)
✓	Remove Desorber, Locking Ring, and Nozzle
✓	Remove stainless filter
✓	Blow out Sample Air Line
✓	Reinstall/Replace stainless filter
✓	Clean/Inspect Membrane
✓	Clean/Reinstall Nozzle and Locking Ring
✓	**Turn Unit ON. Allow system (temperature) to stabilize.**
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✓	Verify approx. 200 cc Detector flow on rear flow meter
✓	Verify Nozzle flow (approximately 0.2 - 0.4 SCFH)
✓	Clean and reinstall desorber
✓	Check Printer Paper supply
✓	Check Sample Trap supply
✓	Check Calibration Trap supply
✓	Clean Workspace
✓	Clean Touchscreen
	Date: 11-2-07 Initials: (b)(7)c

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GE Security

GE Itemiser³

Weekly Maintenance Checklist

To be performed at END of last shift.

Be sure system is powered off and allowed to cool for 10 minutes before starting maintenance.
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✓	Check Calibration Trap supply
✓	Clean Workspace
✓	Clean Touchscreen
	Date: 11-9-08 Initials: (b)(7)c

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	Clean and reinstall desorber
	Check Printer Paper supply
	Check Sample Trap supply
	Check Calibration Trap supply
	Clean Workspace
	Clean Touchscreen
	Date: 11-16-07 Initials: (b)(7)c

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✓	Check Printer Paper supply
✓	Check Sample Trap supply
✓	Check Calibration Trap supply
✓	Clean Workspace
✓	Clean Touchscreen
	Date: 11-23-07 Initials: (b)(7)c

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GE Security

GE Itemiser

Monthly Maintenance Checklist

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Be sure system is powered off and allowed to cool for 10 minutes before starting maintenance.
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✓	Check Dopant level (1/8" (3 mm) minimum fluid)
✓	Remove Desorber, Locking Ring, and Nozzle
✓	Remove stainless filter
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✓	Verify approx. 200 cc Detector flow on rear flow meter
✓	Verify Nozzle flow (approximately 0.2 - 0.4 SCFH)
✓	Clean and reinstall Desorber
✓	Check Printer Paper supply
✓	Check Sample Trap supply
✓	Check Calibration Trap supply
✓	Clean Workspace
✓	Clean Touchscreen
	Date: 11-30-07 Initials: (b)(7)c

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ION Spectrometry Device

Daily Testing Log

December

BP-S730.051 ION SPECTROMETRY DEVICE DAILY TESTING LOG CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE FEDERAL BUREAU OF PRISONS

Serial No. 20617	Date 12-17-06	Random No. (s) 3
Operator Name/Signature [redacted]		

NOTE: Positive Alarms Must ALSO Be Logged On "POSITIVE ALARM LOG"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
830	[redacted]			Neg	[redacted]
910				Pos	
911				Neg	
1230				Neg	
115				Neg	

(This form may be replicated via WP)

Sensitive - Limited Official Use only when completed

BP-S730.051 **ION SPECTROMETRY DEVICE DAILY TESTING LOG** CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE **FEDERAL BUREAU OF PRISONS**

Serial No.	Date	Random No.(s)
20617	12-16-06	6

O (b)(7)c

NOTE: Positive Alarms Must ALSO Be Logged On "POSITIVE ALARM LOG"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
9/5AM	(b)(6)			NEG	(b)(7)c
1/06AM				NEG	
1/2PM				NEG	

(This form may be replicated via WP)

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BP-S730.051 **ION SPECTROMETRY DEVICE DAILY TESTING LOG** CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE **FEDERAL BUREAU OF PRISONS**

Serial No.	Date	Random No.(s)
20617	12-15-06	8 10

Ope (b)(7)c

NOTE Logged On "POSITIVE ALARM LOG"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
530	(b)(6)			Neg	(b)(7)c
631				Neg	
700				Neg	
711				Neg	
717				POS	

(This form may be replicated via WP)

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BP-S730.051 **ION SPECTROMETRY DEVICE DAILY TESTING LOG** CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE **FEDERAL BUREAU OF PRISONS**

Serial No. 20617	Date 12-10-06	Random No.(s) 6
Operator Name/Signature	(b)(7)c	

NOTE: Positive Alarms Must ALSO Be Logged On "POSITIVE ALARM LOG"

Time	Visitor Name	Inmate Name	Req. No.	Result	Initials
843	(b)(6)			Neg	(b)(7)c
847				Neg	
913				Neg	
930				Neg	
155				Neg	
212				Neg	
227				Neg	
115				Neg	
	(b)(7)c				

(This form may be replicated via WP)

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BP-S730.051 ION SPECTROMETRY DEVICE DAILY TESTING LOG CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE FEDERAL BUREAU OF PRISONS

Serial No. 20617	Date 12-9-2006	Random No.(s) 1
Operator Name/Signature [redacted] (b)(7)c		

NOTE: Positive Alarms Must ALSO Be Logged On "POSITIVE ALARM LOG"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
2:09pm	[redacted] (b)(6)			Pos/Neg/N	[redacted] (b)(7)c

(This form may be replicated via WP)

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BP-S730.051 **ION SPECTROMETRY DEVICE DAILY TESTING LOG** CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE **FEDERAL BUREAU OF PRISONS**

Serial No. 20617	Date 12-8-06	Random No. (s) 4
Oper [redacted]		

NOTE: Positive Alarms Must ALSO Be Logged On "POSITIVE ALARM LOG"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
640	[redacted]	[redacted]	[redacted]	Neg	[redacted]
715	[redacted]	[redacted]	[redacted]	Neg	[redacted]

(This form may be replicated via WP)

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BP-S730.051 **ION SPECTROMETRY DEVICE DAILY TESTING LOG** CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE **FEDERAL BUREAU OF PRISONS**

Serial No.	Date	Random No.(s)
20617	12-3-06	2

Operator Name/Si [redacted] (b)(7)c

NOTE: Positive Al [redacted] ALARM LOG"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
11:33a	[redacted] (b)(6)			Neg	[redacted] (b)(7)c
12:44				Neg	

(This form may be replicated via WP)

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BP-S730.051 **ION SPECTROMETRY DEVICE DAILY TESTING LOG** CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE **FEDERAL BUREAU OF PRISONS**

Serial No. 20617	Date 12-2-06	Random No.(s) 5
Op[redacted] (b)(7)c		

NOTE: Positive Alarms Must ALSO Be Logged On "POSITIVE ALARM LOG"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
821A	[redacted] (b)(6)			NEG	[redacted] (b)(7)c
905A				NEG	
1120A				NEG	
1151A				NEG	
1249pm				NEG	

(This form may be replicated via WP)

Sensitive - Limited Official Use only when completed

BP-S730.051 **ION SPECTROMETRY DEVICE DAILY TESTING LOG** CDFRM
FEB 05

U.S. DEPARTMENT OF JUSTICE **FEDERAL BUREAU OF PRISONS**

Serial No.	Date 12-1-06	Random No.(s) 7
Operator Name/Signature	(b)(7)c	

NOTE: Positive Alarms Mus [redacted] LOG"

Time	Visitor Name	Inmate Name	Reg. No.	Result	Initials
515	(b)(6)			Neg	(b)(7)c
535				Neg	
630				Pos	
710				Neg	

(This form may be replicated via WP)

Sensitive - Limited Official Use only when completed

GE Security

GE Itemiser³

Weekly Maintenance Checklist

To be performed at END of last shift.

Be sure system is powered off and allowed to cool for 10 minutes before starting maintenance.
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✓	Verify Nozzle flow (approximately 0.2 - 0.4 SCFH)
✓	Clean and reinstall desorber
✓	Check Printer Paper supply
✓	Check Sample Trap supply
✓	Check Calibration Trap supply
✓	Clean Workspace
✓	Clean Touchscreen
	Date: 12-7-07 Initials: (b)(7)c

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✓	Check Sample Trap supply
✓	Check Calibration Trap supply
✓	Clean Workspace
✓	Clean Touchscreen
	Date: 12-14-07 Initial (b)(7)c

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GE Security

GE Itemiser³

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✓	Check Sample Trap supply
✓	Check Calibration Trap supply
✓	Clean Workspace
✓	Clean Touchscreen
	Date: 12-21-07 Initi

(b)(7)c

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GE Itemiser

Monthly Maintenance Checklist

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✓	Check Printer Paper supply
✓	Check Sample Trap supply
✓	Check Calibration Trap supply
✓	Clean Workspace
✓	Clean Touchscreen
	Date: 12-28-07 Initials: (b)(7)c

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FedCure FOIA Litigation

2005-03326

Cover Sheet

This Section Contains:

C. Information related to the training methods used for operators

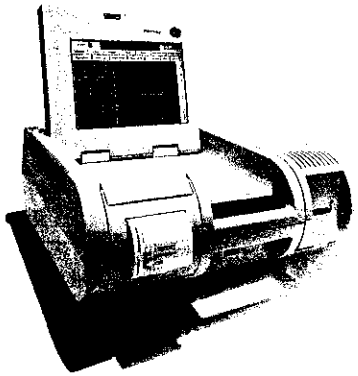
Location: FCI Englewood

Name and phone number of person conducting search:

K. Burton / S. Leyba

Itemiser³

Maintenance Student Guide



SG001017 Rev. 2

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The product contains a Microsoft Windows CE Operating System. Your use of the Windows CE Operating system is governed by the terms of the Microsoft End User Licensing Agreement that is enclosed with the system.

Intended use

Use this product only for the purpose it was designed for; refer to the data sheet and user documentation. For the latest product information, contact your local supplier or visit us online at `www.gesecurity.com`.

FCC compliance

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

You are cautioned that any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Regulatory

CE ISO 9001 Certified

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Warnings and cautions xii
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Calibration Warning 3
Battery Operation 3
Low Battery 4
Stabilizing Temperature 4
Sample Flow Warning 5
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operating this product. The most current versions of this and related documentation are available through GE Homeland Protection Customer Service.

Conventions used in this document

The following conventions are used in this document:

Bold	Menu items and buttons.
Italic	Emphasis of an instruction or point; special terms.
	File names, path names, windows, panes, tabs, fields, variables, and other GUI elements.
	Titles of books and documents.
Blue italic	(Electronic version.) Hyperlinks to cross-references, related topics, and URL addresses.
Monospace	Text that displays on the screen.
	Programming or coding sequences.

Safety terms and symbols

These terms may appear in this manual:

General Warning: User should use care to avoid possible damage to equipment. This warning is accompanied by additional text information indicating the details of the warning.

Hot Surface Warning: User should use care when working near or on the labeled item.

High Voltage Warning: User should use appropriate electrical safety precautions.

Radiation Warning: Indicates the presence of a radioactive source

Warnings and cautions

The Itemiser Detector contains a radioactive nickel 63 source of 10 millicuries (370 MBQ) strength. The source is fully enclosed in the detector of the instrument that stops all primary radiation. The detector has been designed in compliance with USNRC guidelines for safety. If a problem is suspected with the detector, DO NOT open the detector—call GE Homeland Protection's Technical Service Department. Then, if necessary, return the instrument to GE for service. Note that in some countries, notification of receipt and registration of the source may be required by the national government body responsible for control of radioactive sources.

Note: Annual Radiation wipe test is NOT required for this instrument.

The detector must be disposed of properly in accordance with local, state, and federal (or national) regulations. Please contact your local hazardous waste disposal facility or GE for proper disposal methods.

CAUTION: Do not position the unit so that it is difficult to operate the disconnecting device.

CAUTION: If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

Rear panel symbols

System Off:
Indicates the system is off.

System On:
Indicates the system is on.

COM Port:

Network

Keyboard

~	Alternating Current (AC): Indicates alternating current.
⎓	Direct Current (DC) Symbol
	Fuse
	Monitor

Chapter 1 Warnings

This chapter provides an explanation of the Itemiser warning messages and procedures for clearing or correcting them:

Overview 2
Detector Flow Warning 2
Calibration Warning 3
Battery Operation 3
Low Battery 4
Stabilizing Temperature 4
Sample Flow Warning 5
No Desorber 5

Overview

1. Double pressing any of the yellow warning messages in the status bar will display a description of the warning.
2. Press **OK** to close the dialog box.

Detector Flow Warning

Figure 1. Detector Flow Warning message

Detector Flow Warning
Dual Mode Warnings: Press for help

The *Detector Flow Warning* indicates the detector flow is outside the calibrated range. Routine maintenance may resolve this warning. If the warning persists, contact GE Homeland Protection's Technical Service.

Calibration Warning

Figure 2. Calibration Warning message

Calibration Warning
Dual Mode Warnings: Press for help

The *Calibration Warning* appears every 8 hours by default. To resolve the warning, calibrate the instrument.

Battery Operation

Figure 3. Battery Operation message

Battery Operation
Dual Mode Warnings: Press for help

The *Battery Operation* warning indicates the system is running on internal battery power. This feature is useful for transporting the system without the need to power down. At the maintenance level, you can analyze samples while running in battery operation. Please note

that the battery power will greatly be reduced when analyzing samples.

Low Battery

Figure 4. Low Battery message

Low Battery

Dual Mode Warnings: Press for help

The *Low Battery* message displays if the battery is low and the system is about to power down. You will need to switch to AC power or power down immediately.

Stabilizing Temperature

Figure 5. Stabilizing Temperature message

Stabilizing Temperature...

Dual Mode Warnings: Press for help

This warning appears as the system is stabilizing the detector and desorber temperatures, if this warning persists for more than 40 minutes, it could be an indication of a fault. Contact GE Homeland Protection's Technical Service.

Sample Flow Warning

Figure 6. Sample Flow Warning message

Sample Flow Warning

Dual Mode Warnings: Press for help

The *Sample Flow Warning* indicates the sample flow is outside the calibrated range. Routine maintenance may resolve this warning. If the warning persists, contact GE Homeland Protection's Technical Service.

No Desorber

Figure 7. No Desorber message

No Desorber

Dual Mode Warnings: Press for help

This message displays if the desorber is missing or not installed correctly.

Chapter 2 Menu Functions

This chapter instructs the Maintenance user on the various menu functions:

Menu Functions 8
Recall 8
Save 9
Print 9
Options 9
Users 9
Config/Notes 10

Menu Functions

Figure 8. Maintenance Menu

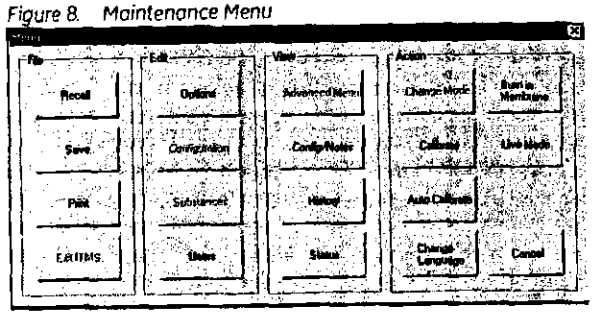


Table 1. Maintenance Menu Functions

Function	Description
Recall	Automatically displays the alarm file folder where the user can recall an alarm or other saved file. Press **Clear** to clear a recalled file.

Table 1. Maintenance Menu Functions

Function	Description
Save	Allows the user to save a signal or alarm file to the alarms folder. A keyboard is needed to enter file names and notes.
Print	Allows the user to print data and config to the built-in thermal printer, page feed the printer and obtain access to a local or network printer.
Options	Accesses the option menu where you can choose various display options for data, set screensaver time-out, auto save and auto print functions, set the default required calibration time, initiate a charge to the battery back up and set the time for the regenerative dryers to switch.
Users	Allows you to add, modify and delete users at the maintenance level and below.

Table 1. Maintenance Menu Functions

Function	Description
Config/Notes	Displays notes, file name, software version, time the sample was taken, last calibration time, serial number, current detection mode, sample time, warnings at last trigger, current user level, system temperature, substance configuration.
History	The Itemiser³ system automatically records session information in a history file. The history file lists all mode changes, files saved, warnings issued, log on/off information, alarm occurrences, and manual and automatic calibrations performed. These history files can be accessed and copied to a floppy disk or to a network location for further analysis.

Table 1. Maintenance Menu Functions

Function	Description
History	• Add Maintenance Log to save a brief note about maintenance to the history. • Export History allows you to export the history files to a floppy disk or to a network or file location • Purge history allows you to delete all history data before the selected *From* date.
Calibrate	Prompts you to select a mode (Dual Peak or Single Peak) for manually calibrating the system.
Burn In Membrane	Heats desorber and detector to maximum temperatures to accelerate cleaning of the membrane. The default burn in time is four hours.

Table 1. Maintenance Menu Functions

Function	Description
Live Mode	The plasmagram screen shows the real time status of the detector in red and the processed data in green. Press **Menu/Live Mode** once to turn on live mode, press **Menu/ Live Mode** a second time to turn live mode off.

Chapter 3 Calibration

This chapter instructs the Maintenance user on the calibration procedures:

Reasons for Manual Calibration . . . 14
Manual Calibration 14

Reasons for Manual Calibration

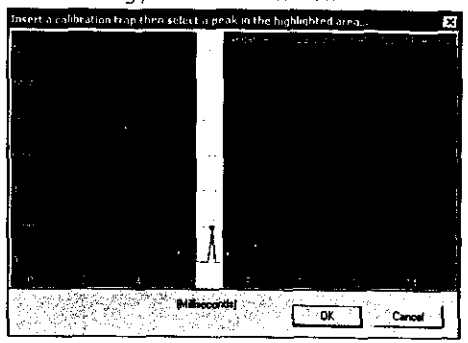
- The auto calibration routine failed
- Allows the user the ability to select the correct peak to calibrate on even if it is outside the white window or if the peak height is too low.
- If a peak is selected outside of the white window during manual calibration, you will need to set the default cal factors to reset the white window.

Manual Calibration

1. Press **Menu/Calibrate**.
2. Press **Dual Peak Calibrate**.
3. Select **Neg-Cal-1** then press **OK**.
4. Insert the calibration trap into the desorber.

5. Remove and discard the trap when directed.
6. Select peak in white window.

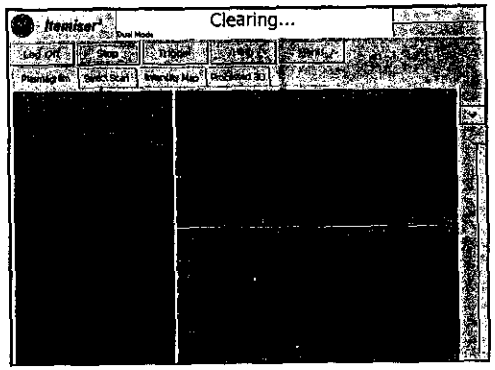
Figure 9. Selecting peak in white window



7. Select **OK**.
8. Select **Pos-Cal-1** and press **OK**.
9. Select peak in white window.
10. Select **OK**.
11. Press **Yes** to accept the calibration.

12. Press **OK**.
13. Press **Clear**.

Figure 10. Clearing



14. When *No Alarm-Ready* appears, the system has cleared and is ready for use.

Chapter 4 Preventive Maintenance

This chapter instructs the Maintenance user on the preventive maintenance procedures:

Overview 18
Weekly Maintenance 18
Monthly Maintenance 25
Annual Maintenance 27
As Needed Maintenance 31

Overview

Preventive maintenance is required to keep the Itemiser system calibrated, clean, and dry.

Weekly Maintenance

- Check Fan Filter
- Check Dopants
- Remove Desorber, Ring & Nozzle
- Remove Stainless Steel Filter
- Blowout Sample Line
- Reinstall Stainless Steel Filter
- Clean Membrane
- Reinstall Nozzle and Ring
- Power Up and Check Flows
- Verify Nozzle Flow
- Clean Desorber

Check Fan Filter

1. Remove the plastic filter cover
2. Clean the fan filter with canned air.
3. Replace filter if damaged.

Check Dopants

1. Carefully pull with a twisting motion.
2. The large tube is the Dichloromethane (negative ion) Dopant, and the three small tubes are Ammonia (positive ion) Dopants. Replace any tubes that are empty.

Remove Desorber

1. Remove the desorber.
2. Unscrew the locking ring.
3. Remove nozzle.

Remove Stainless Steel Filter

1. While the desorber is removed, unscrew the filter cover.
2. Check the o-ring on the filter cover for cracks or damage. Replace if necessary.
3. Using the wooden membrane tool, remove stainless steel filter.
4. Remove rubber washer from back of filter housing.

Blowout Sample Line

1. With nozzle removed, blow air through the sample line entrance to the right of the membrane (At the 3 O'clock position).

Figure 11. Blowout Sample Line

2. Hold the can upright and blast the air through the sample line for approximately 3 seconds.

Reinstall Stainless Steel Filter

1. Clean inside stainless steel filter housing.

2. Check the filter. Replace if discolored.
3. Using the wooden membrane tool reinstall stainless steel filter and rubber washer.
4. Reinstall the filter cover.

Clean Membrane

1. Gently clean the membrane with the side of an alcohol swab.
2. Inspect the membrane for damage. Replace if necessary.[see monthly maintenance for replacement procedure.]

Reinstall Nozzle & Ring

1. Clean nozzle using alcohol swab and reinstall.
2. Reinstall locking ring.

Power Up and Check Flows

1. Plug in the power cord.
2. Turn ON the power switch and allow system to warm up until the temperatures stabilize.
3. Check Sample flow. Should be at 200 cc/min. +/- 10%
4. Adjust only when there is a Sample or Detector Flow warning and the flows are out of range.

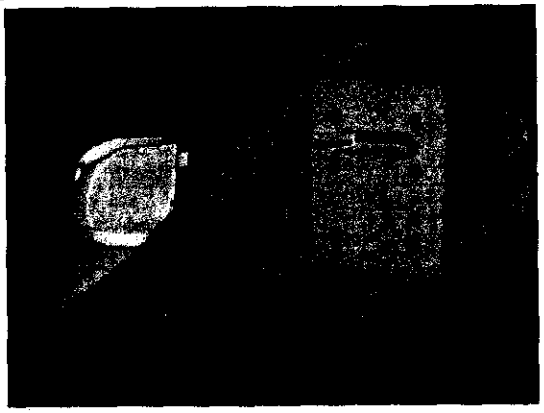
Verify Nozzle Flow

1. With the desorber removed, attach the plastic tubing from the flow meter to the nozzle.
2. Verify the meter reads approximately 0.2 to 0.4 SCFH.

Cleaning Desorber

1. Clean the desorber with the alcohol swabs and blow out with canned air.

Figure 12. Cleaning the Desorber



2. Reinstall the desorber, ensuring you have it properly connected to the interface.

Monthly Maintenance

- Change Membrane
- Verify Nozzle Flow
- Burn In Membrane

Change Membrane

1. The wooden membrane tool helps to remove pieces of the membrane.
2. Install new membrane. Carefully inspect membrane to ensure no tears occurred during installation.

CAUTION: When removing the old membrane from the Interface housing, you must only use the wooden membrane tool. Use of a plastic or metal instrument will damage the surface of the Interface.

Verify Nozzle Flow

1. Power up the system and allow temperatures to stabilize.
2. With desorber removed, attach the plastic tubing from the flow meter to the nozzle.

Figure 13. Verify Nozzle Flow

3. Verify the meter reads approximately 0.2 to 0.4 SCFH.

Burn In Membrane

1. Re-install desorber.
2. Select **Menu/Burn in Membrane**.
3. Press **Yes** to initiate a four hour burn in.

Annual Maintenance

Wipe Test Requirements

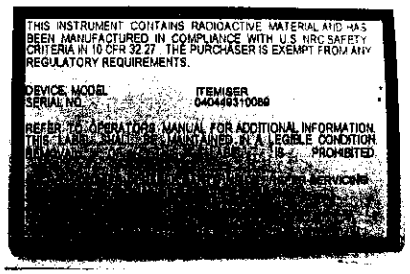
Newer models of the Itemiser³ system have been modified for compliance with NRC safety guidelines regarding the radioactive nickel 63 metal foil in this instrument. The material is fully enclosed in the detector, which stops all primary radiation. This part of the Itemiser³ is not accessible to the user. The sample labels below indicate which instruments still require the user to perform the radiation wipe test once per year

vs. instruments that are exempt from annual testing.

Instruments that are exempt from the Radiation Wipe Test

If the label looks like the one in the photo below and contains text about being exempt from any regulatory requirements, the Itemiser³ is not required to have any annual radiation testing performed.

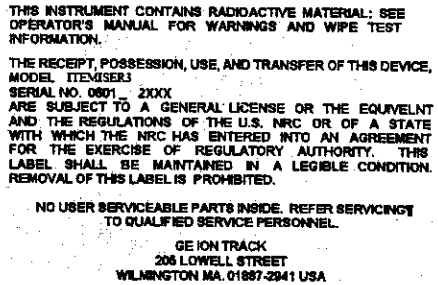
Figure 14. Exempt serial number label



Instruments that are NOT exempt from the Radiation Wipe Test

If the label looks like the one in the photo below and contains text about wipe test the Itemiser³ is required to have annual radiation testing performed.

Figure 15. Non exempt serial number labels

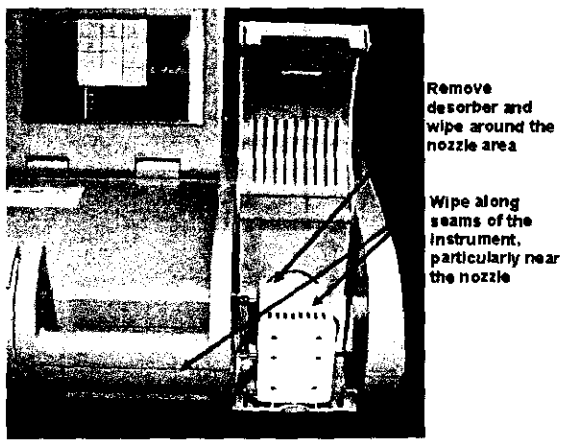


Radiation Wipe Testing

Once a year, contact your local testing firm (independent of GE Homeland Protection) to

send you a radiation test kit. These wipe test kits contain instructions on how to perform a wipe test along with treated swabs to perform the wipe test. The swabs used to test for radiation leaks are mailed back to the testing firm. The diagram below indicates the area on the Itemiser³ that is to be tested.

Figure 16. Radiation Wipe Test



As Needed Maintenance

Fuse replacement

There are two fuses that may need replacement, an AC fuse located above the AC power connector and a DC fuse located below the DC IN connector.

AC power connector fuse

1. Power down the unit
2. Using a screwdriver pry open the fuse cover.
3. Remove the fuse and replace with a new one.

DC IN connector fuse

1. Power down the unit.
2. Using a screwdriver, unscrew the fuse counterclockwise.
3. Pull the fuse out and replace with a new one.
4. When reinstalling fuse push in and turn clockwise.

Chapter 5 Contact Information and Notes

This chapter provides contact information and a place to write notes:

Contact Information 34
Notes 36

Contact Information

GE Homeland Protection 205 Lowell Street Wilmington, MA 01887 USA TEL: 800-433-5346 FAX: 866-249-9105	GE Homeland Protection Granary House, Station Rd. Great Shelford, Cambridge CB2 5LT United Kingdom TEL: +44 (0) 1223 728888 FAX: +44 (0) 1223 728889
GE Homeland Protection Unit 4, 9 Eden Park Drive Sydney Australia 2113 North Raid NSW AU Service.homeland@ge.com TEL: +61 2 9815 7900 FAX: +61 2 9889 7511	GE Homeland Protection, Washington DC 1299 Pennsylvania Avenue Suite 100W Washington, DC 20004 USA TEL: 202-637-4000 FAX: 202-637-4232

GE Homeland Protection Customer Service USA TEL: 866-517-5580 from 8:30 a.m. to 5:00 p.m. (EST) UK TEL: +44 (0) 1223 728888 from 9:00 a.m. to 5:00 p.m. (GST) Australia TEL: +61 2 9815 7900 from 9:00 - 5:00 AEST	GE Homeland Protection Technical Service USA TEL: 877-877-1008 (24 hours a day) Service.homelandprotection.us@ge.com U.K. TEL: +44 (0) 1223 728888 from 9:00 a.m. to 5:00 p.m., GST Service.homelandprotection.uk@ge.com Australia TEL: +61 2 9815 7900 from 9:00 - 5:00 AEST Service.homeland@ge.com

Notes

FedCure FOIA Litigation

2005-03326

Cover Sheet

This Section Contains:

C. Information related to the training methods used for operators

Location: FCI Englewood

Name and phone number of person conducting search:

K. Burton / S. Leyba

Itemiser^3

Operator Course

Explosives & Drugs

PN: TM001016 rev:2

Prerequisites: None

Course Objective: At the completion of this course the student will be able to properly operate the Itemiser^3 without supervision.

Trace

1. State the purpose of trace detection. 2. Identify substances detected. 3. Describe how trace substances are transferred. 4. Describe the various applications for the products.

Equipment Overview

1. Describe the purpose and function of each major component. 2. Describe power up, login, and power down of equipment.

Calibration

1. State the reasons for calibration. 2. Describe calibration procedures. 3. Demonstrate calibration procedures.

Sampling

1. Describe particle detection. 2. State the sampling fundamentals for particle sampling. 3. Demonstrate proper sampling techniques.

Analysis

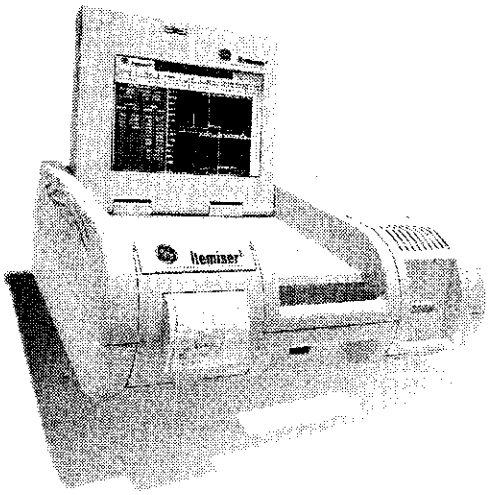
1. Describe proper analysis procedures. 2. Describe alarm response example.

Maintenance

1. State the shift maintenance requirements for the product. 2. Perform the shift maintenance requirements for the product.

Course Overview

GE Ion Track



- Trace Detection
- Equipment Overview
- Calibration
- Sampling
- Itemiser^3 Analysis
- Shift Maintenance

PN: TM001016 rev.2

Trace Detection

Upon successful completion of this topic the trainee will be able to:

•State the purpose of trace detection.

•Identify substances detected.

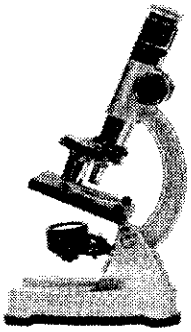
•Describe how trace substances are transferred.

•Describe the various applications for the products.

Trace Detection

GE Ion Track

Purpose of Trace Detection



- Traces are microscopic amounts of particles and vapors.
- Explosive and narcotic substances are organic substances and constantly give off traces.
- Trace detection involves identifying amounts that cannot be seen by the human eye.

PN: TM001016 rev:2

Trace detection is a process of sample COLLECTION and ANALYSIS of target substances, in amounts as small as one billionth of a gram, that are "not visible" by any other means.

The Itemiser^3 will detect these traces down to nanogram levels. A nanogram is one billionth of a gram.

One Billionth is as small as a one piece of a single grain of salt cut into a thousand pieces.

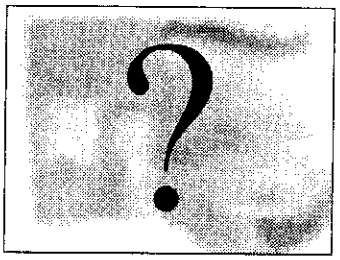
One Billionth is as packet of sugar dissolved in the water of an Olympic sized pool.

Trace Detection

GE Ion Track

Purpose of Trace Detection

An IED (Improvised Explosive Device)
can look like anything limited only
by the imagination and resources
of the bomb-maker



PN: TM001016 rev:2

Although conventional Improvised Explosive Devices (IEDs) are used in situations that do not require camouflage, most IEDs today will be disguised to look like other devices. Constructing and handling this type of device will most likely cause the explosive traces to contaminate the objects and anyone that has handled them.

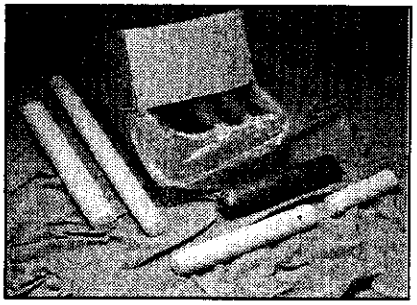
Trace Detection

GE Ion Track

Substances Detected

Plastic Explosives:

- **PETN**
- **RDX (C-4)**
- **SEMTEX** (PETN & RDX)
- **HMX** Cyclotetramethylene tetranitramine.



Other Explosives:

- **TNT** - Trinitrotoluene
- **Nitro** - Nitroglycerine
- **AM NO3** - Ammonium nitrate (NH_4NO_3)
- **TATP**
- Smokeless Powder

PN: TM001016 rev:2

Plastic Explosives:

-PETN (Deta sheet and detonation cord. Most fuses in smoke and fragmentation hand grenades.) PETN and RDX are the active explosives that may be combined with other organic materials to form a moldable high explosive.

-RDX (C-4, Common type of plastic explosive.)

-SEMTEX (A plastic explosive made up of PETN and RDX).

The standard characteristic of plastic explosives is that they can be molded or formed into any shape.

Other Explosives:

•TNT (Baseline for referencing other explosives.)

•DNT (Cousin of TNT.)

•Nitro (Nitroglycerin)

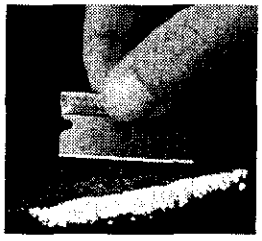
•AM NO3 (Ammonium Nitrate –Found in some fertilizers; used in Oklahoma City bombing.)

•TATP (Tri Acetone Tri Peroxide)

Trace Detection

GE Ion Track

Substances Detected



Drugs Detected:

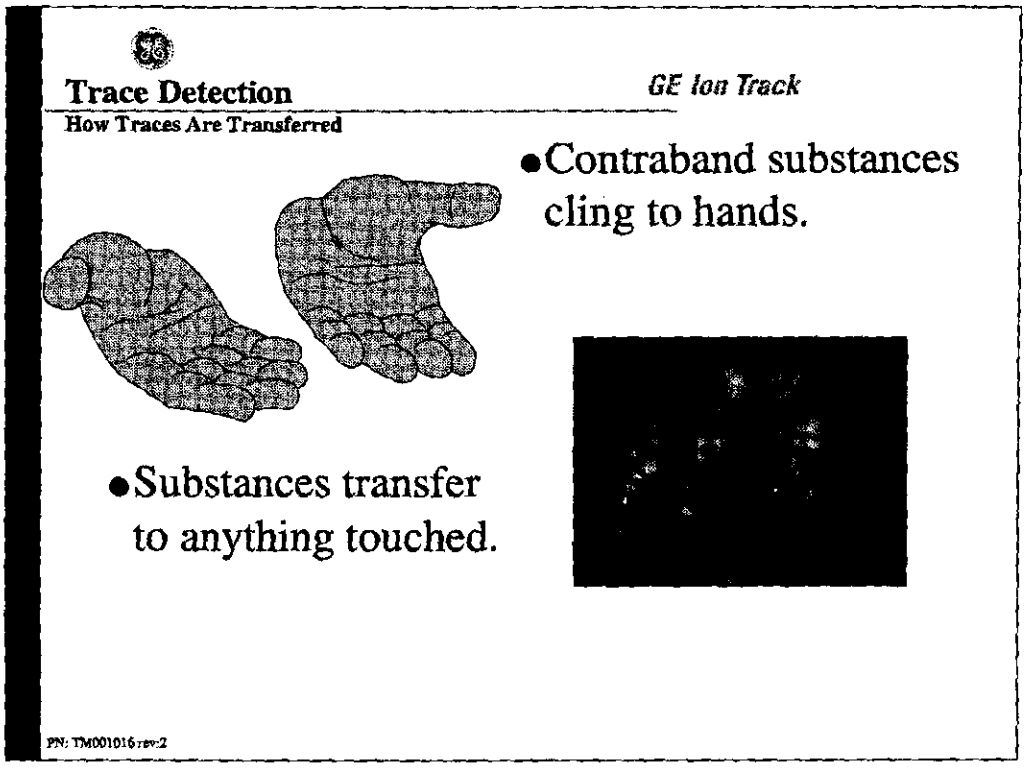
- Cocaine
- Heroin
- THC
- Methamphetamine
- Amphetamine
- PCP

PN: TM001016 rev:2

Cocaine: A Stimulant, also called Coke, Crack, Flake, Rocks or Snow
Heroin: A Opiate, also called Horse or Smack
THC: A Hallucinogen [Marijuana, Hash]

Methamphetamine: A stimulant, also called Crank, Glass, Ice or Speed
Amphetamine: A Hallucinogen, also called Ecstasy, STP or XTC
PCP: A Hallucinogen, also called Angel Dust

Note: Drug samples need to be put into the Itemiser^3 within 5 to 10 minutes after sampling.



Contraband traces are transferred to anything they touch (think fingerprints)

•Person to person (Shaking hands, etc.)

•Person to object (Touching the handle of a bag, etc.)

•Object to object (Contaminated bag touching another bag, etc.)

Traces are product of the environment. Think of being in a room with smokers. The tobacco smell clings to the clothing and hair of people who just pass through.

Trace can be absorbed by the skin and later released (onion and garlic cooking are example).

Body chemistry and personal hygiene habits affects the life span of trace samples.

Trace Detection

GE Ion Track

How Traces Are Transferred

Legitimate Reasons for Explosive Traces:

Medication:

- Nitroglycerin
- RDX

Occupations:

- Military
- Construction/Demolition
- Agriculture
- Landscaping
- Lab Workers

PN: TM001016 rev:2

If the instrument alarms it does not necessarily mean the person is carrying an IED.

Some common substances and chemicals can have traces similar to explosives. As an example, some types of sugar have been known to alarm on RDX.

Some items such as soaps, creams, lotions contain fragrances which can cause unexplained alarms.

RDX & Nitroglycerin are used as a heart medications. For this reason, questions on medications should be a part of your alarm resolution policy.

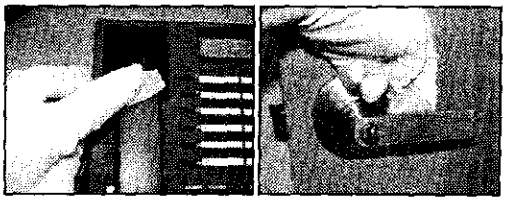
Fertilizers contain Nitrates.

Trace Detection

GE Ion Track

Applications

- Cargo, mail, and packages
- Conveyance access - Security access points, border crossings, checkpoints
- Baggage
- Vehicles
- Facilities protection - government buildings, correctional institutions



PN: TM001016 rev:2

•The Itemiser[3] improves the ability to detect contraband.

•May be used along with X-ray, metal detector, and physical inspection at facilities.

•This unit must be used in accordance with the policies and procedures put into place by the owner of the system.

Trace Detection

GE Ion Track

Review Questions

1. What is the purpose of Trace Detection?
2. Name some of the substances that can or cannot be identified.
3. How are traces transferred?
4. Where can trace detection be used?
5. Discuss how the following might or might not be detected with the Itemiser^3?
   - Firearm
   - Laptop or radio lined with plastic explosive
   - Heart medication
   - Pepper spray
   - Stun gun
   - Explosive traces on package or suitcase
   - Cocaine

PN: TM001016 rev:2

1.

2.

3.

4.

5.

-
-
-
-
-
-
-

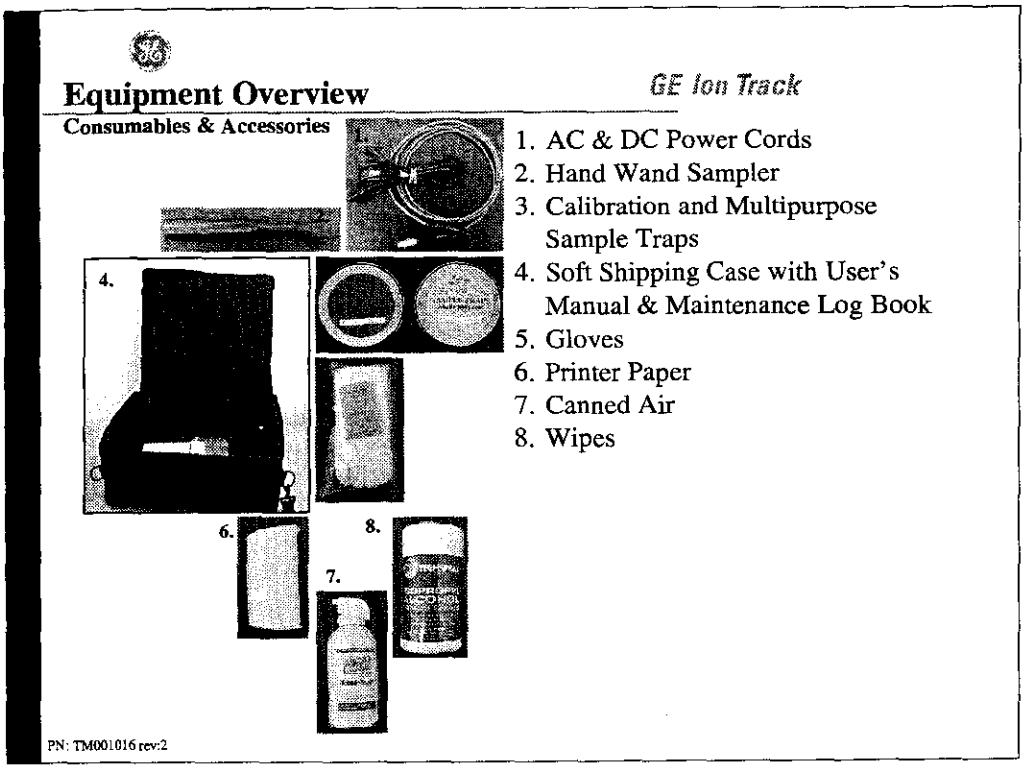
Equipment Overview

Upon successful completion of this topic the trainee will be able to:

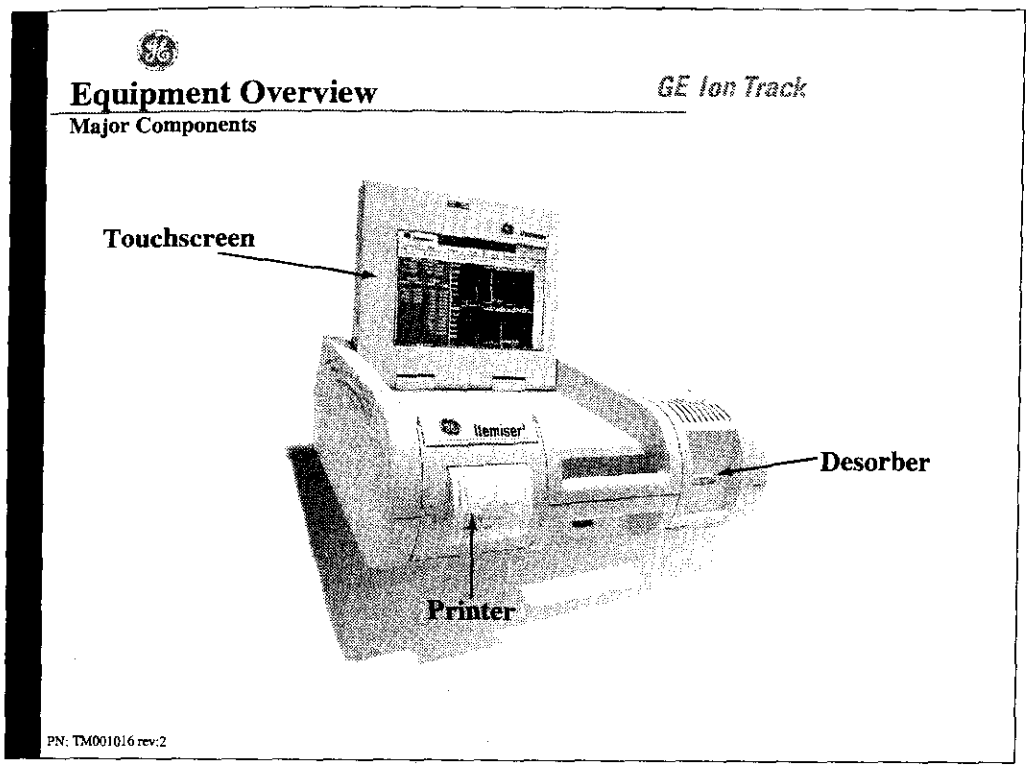
•List the Consumables and Accessories of the Itemiser^3.

•Describe the purpose and function of each major component.

•Power up, log on, log off and power down of the equipment.



Check the "Best Used By" date on the bottom of the Calibration and Multipurpose Sample Traps. [Picture 3]



Touchscreen:

•Allows for navigation through system functions

•Do not use abrasive cleaners

•Use fingers only to touch the screen

Printer:

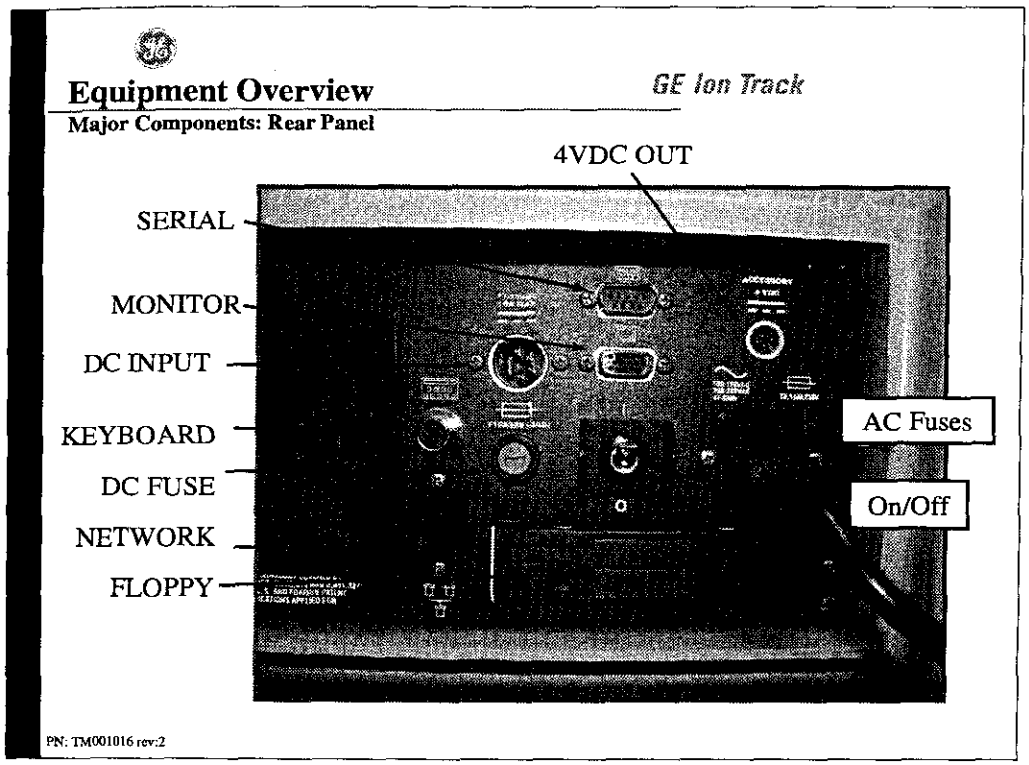
•Outputs system configuration and alarm data

•Printer uses thermal paper that only prints only one side and will fade over time.

Desorber:

•Insert only GE Ion Track supplied traps

•CAUTION!!! This area is a hot surface!



Rear panel components:

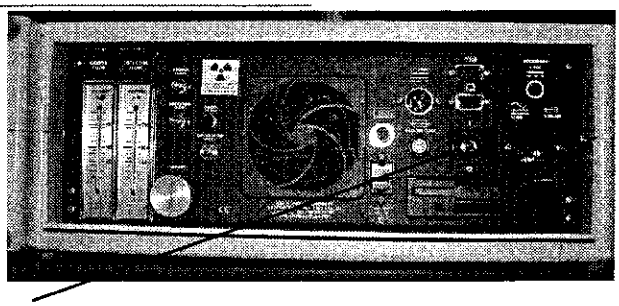
- Serial Connector *
- Monitor Connector *
- DC Input *
- Keyboard *
- DC Fuse
- Network Connector *
- AC Fuses
- Floppy Drive – for software upgrades
- On/Off Switch
- 4VDC Out *

* *Optional functionality*

Equipment Overview

GE Ion Track

Power Up



1. Power-up the system.
2. Wait approximately 30 minutes for warm up and stabilization.

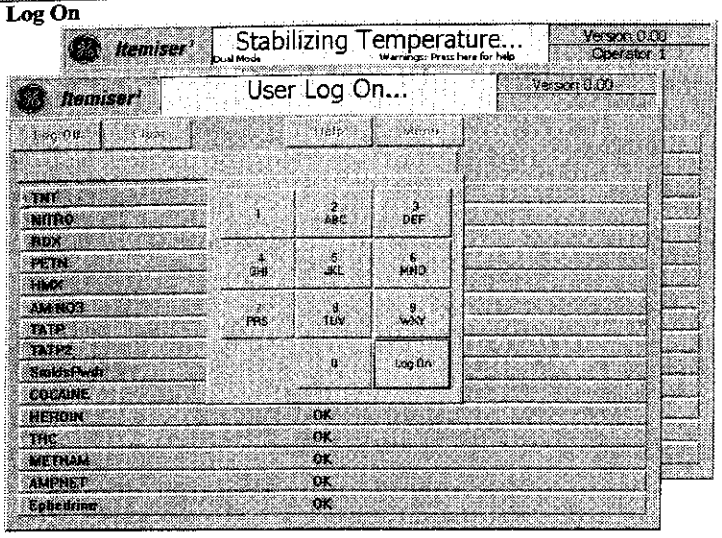
PN: TM001016 rev:2

Note: Once powered up Itemiser^3 should be left running continuously, even when not being used.

Equipment Overview

GE Ion Track

Log On



Log on:

- Operator default PIN is: 1 2 3 4.

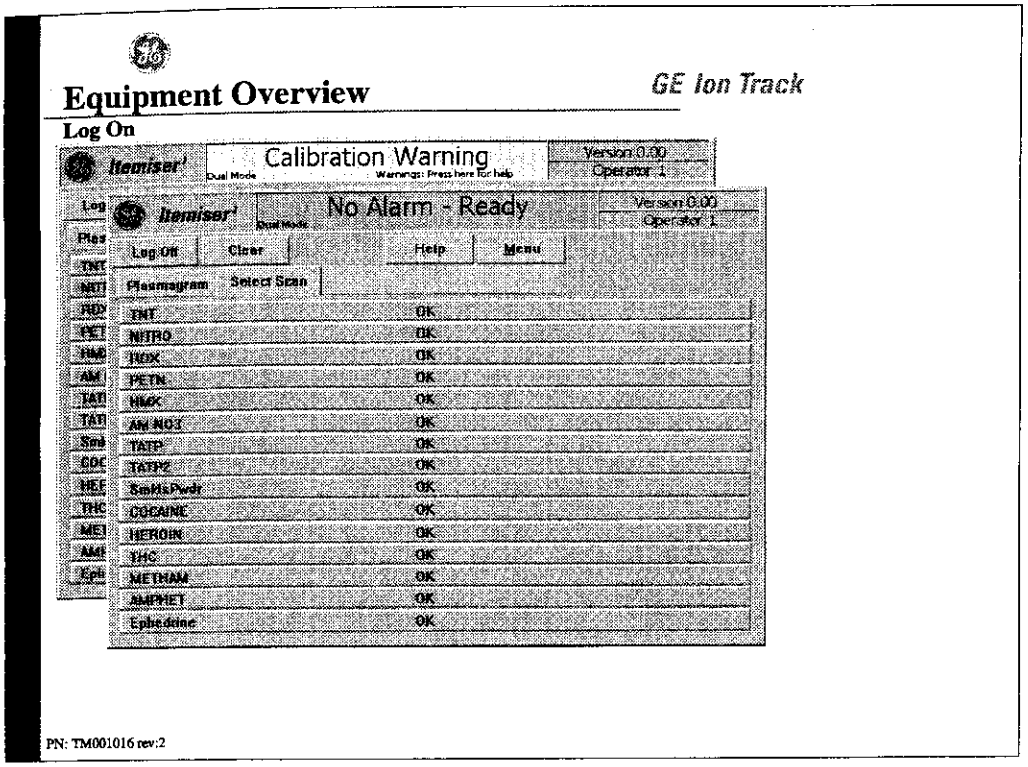
PN: TM001016 rev:2

If logging in when initially powering up the Itemiser[3], you will see the stabilizing temperature warning. It usually take at least 30 minutes to warm up the system from a cold start. It is best to leave the power on continuously, 24 hrs/day.

Enter the appropriate PIN and press **<Log On>**

GE Ion Track recommends that the passwords be changed once the system is installed.

At the end of shift, press **<Log Off>**. It is not necessary nor recommended to power off the device after logging off.



At initial power on or after a time predetermined by your administrator within the system configuration, the Calibration Warning will appear. This informs the operator that a calibration is required.

Calibration is covered later in the course.

After Log on and calibration, the Select Scan Screen should be selected and show "No Alarm – Ready"

At the completion of your shift, log off. It is not necessary to power down the system. The system should be left running to keep it stabilized.

Equipment Overview

GE Ion Track

Questions

1. What are the Major components of an Itemiser^3?
2. What is your log in PIN?
3. Where is the power switch located?
4. What actions must be done after initial power up before operation of the system?
5. Should the system be powered off between shifts?

PN: TM001016 rev:2

1.

2. My PIN is _____

3.

4.

5.

Calibration

Upon successful completion of this topic the trainee will be able to:

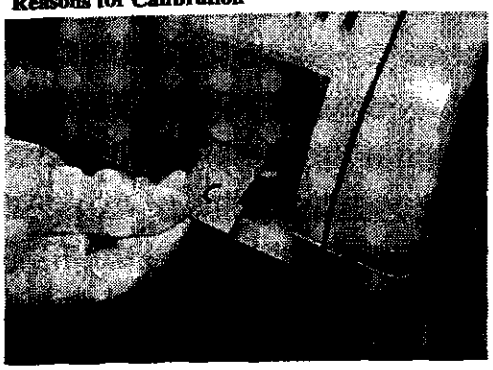
•State the reasons for calibration.

•Demonstrate Auto-Calibration procedures.

Calibration

GE Ion Track

Reasons for Calibration



Why Calibrate and what does calibration do?

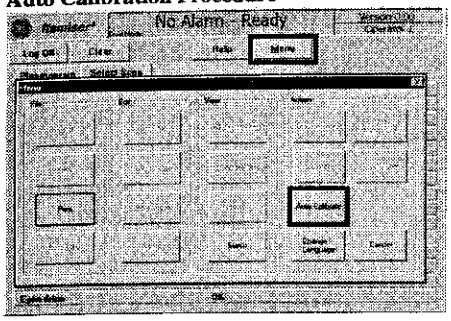
PN: TM001016 rev:2

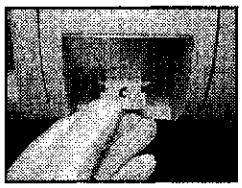
- To insure that the Itemiser^3 is working properly.
- Compensate for changes in atmospheric pressure and humidity.
- Uses a calibration trap, with a known substance, to establish a reference point for the system library.
- Calibration involves putting a calibration trap, with a known substance, into the system and identifying it. This establishes a reference point for the internal library of the system and allows it to reference all other substances in the library.
- During normal operation, conditions such as atmospheric pressure and humidity can affect the ability of the system to detect contraband. By performing periodic calibrations, the system compensates for these changes.

Calibration

GE Ion Track

Auto Calibration Procedure





1. Press <Menu> and then press <Auto Calibrate>
2. When the Status bar asks for the Calibration trap, insert a Calibration trap into the Desorber.
3. The Itemiser^3 will sample. The Status bar will prompt for the removal of the Calibration Trap.
4. Discard the Trap after removal.
5. The unit will go through an analysis then display calibration results in a pop-up window:
   Press OK to accept the calibration values shown on the screen.
6. Press <Clear> and let the Itemiser^3 clear.

PN: TM001016 rev:2

If Auto Calibration fails to calibrate the system [Step 5.] then:

1. Repeat the Auto Calibration with a new Calibration Trap.
2. Check the "Best Used By" date on the can.
3. Use a fresh [new] can of Calibration Traps.

If the Traps are alright and the system fails to calibrate twice, call the system administrator, maintenance technician or initiate standard protocol for troubleshooting.

After Auto-Calibration:

The system will perform multiple cleaning cycles until the system clears.

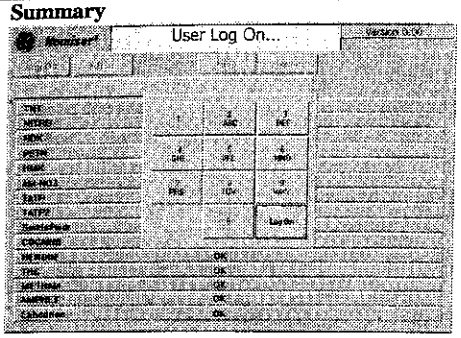
If the system fails to clear, or takes a long time to clear, it may be necessary to initiate troubleshooting procedures. Remember that particularly strong "hits" will take longer to clear.

After clearing, the No Alarm-Ready Screen will appear.

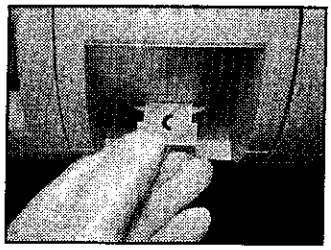
Calibration

GE Ion Track

Summary



1. Why is calibration necessary?
2. How often do you calibrate?



PN: TM001016 rev:2

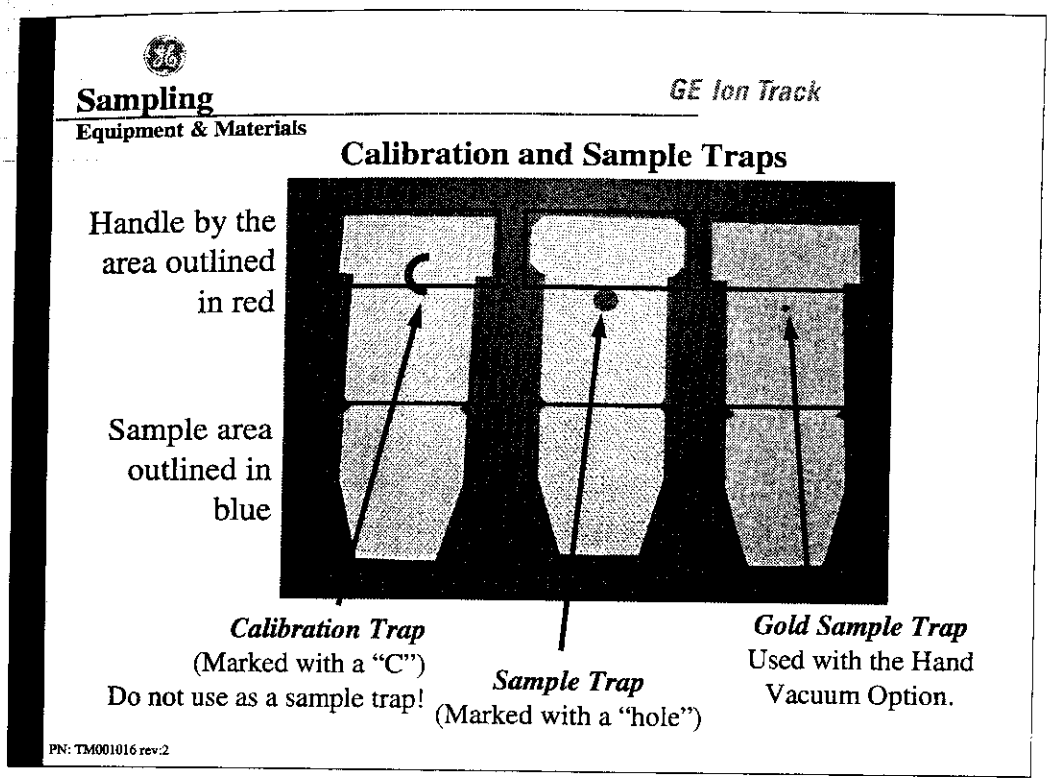
1.

2.

Sampling

Upon successful completion of this topic the trainee will be able to:

- Describe the material & equipment used for particle detection
- Describe the "Optional" Vacuum sampling unit.
- State the sampling fundamentals for particle sampling
- Demonstrate proper sampling techniques

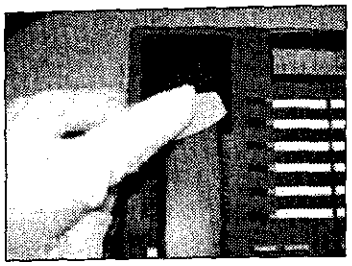


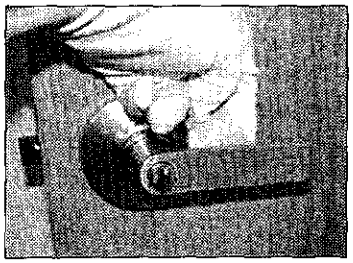
As a rule of thumb, a trap can be used for five sampling events. An event is sampling one or more surfaces and then placing the trap into the Desorber for analysis.

Sampling

GE Ion Track

Sampling Techniques: Hand





- Use firm contact.
- Sample in one direction, one time.
- Take smart samples.
- Sample most-touched last.

PN: TM001016 rev:2

Supplies and procedures:

- Sampling traps
- Gloves keep oils off your sample, and can be thrown away if contaminated. Cotton gloves are preferred since other materials may contain contaminants.
- When choosing a table upon which to place items to be sampled, a non-porous table is recommended. Place only one item at a time on the sample table.

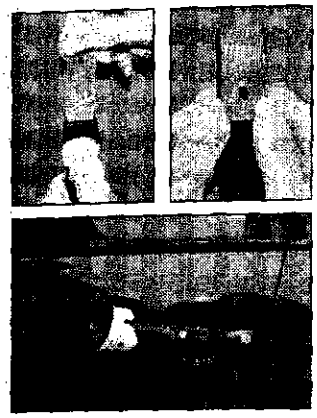
Sampling fundamentals:

- Sampling one item at a time allows for easy identification of what object caused the alarm. However, each object might have multiple areas that will need to be sampled. In a single vehicle many items could be sampled, such as boxes in the bed of a truck or bags in a trunk, etc.
- Wipe in one direction with firm pressure. Do not use a back and forth (polishing) type wipe method!
- Smart sampling: Sample where has the item has most likely been touched.
- If taking multiple samples of potentially contaminated areas on a single item or vehicle, start with the least handled surface and sample to the most touched surface.

Sampling

GE Ion Track

Sampling Techniques: Wand



To take a particle sample with the hand wand:

1. Press button on backside of Wand and insert tip of trap into Wand.
2. Let go of button and push wide area of trap down until pin goes through provided hole in trap.
3. Handle by wide end of trap only.
4. Perform sampling procedures.
5. Remove trap from the wand.
6. Insert trap into the Desorber.
7. The instrument automatically samples.
8. When prompted, remove sample trap.
9. Note Results.

PN: TM001016 rev:2

Supplies and procedures:

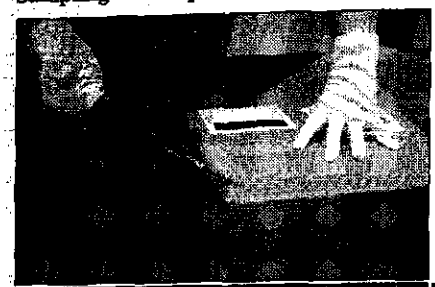
•Sampling traps

•Hand Wand

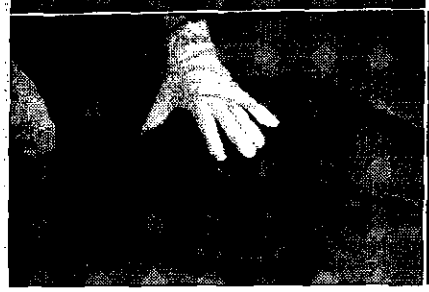
•Follow the same guidelines for sampling as you do when sampling by hand.

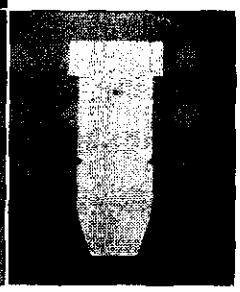
Sampling

Sampling Techniques: Vacuum Wand



- The gold colored sample trap must be used with the vacuum wand.
- Use the same methods when sampling with the vacuum wand as when sampling by hand or hand wand.





The vacuum wand is optional.

Sampling

Sampling Techniques: Vehicles

Vehicles:

- Door handle
- Gas cap
- Steering wheel
- Knobs
- Seat Belt
- Luggage
- Wherever there may be a fingerprint.

Proper sampling areas on the outside of a vehicle:

- Door handles
- Hood
- Latches
- Mirrors

Proper sampling areas on the inside of a vehicle:

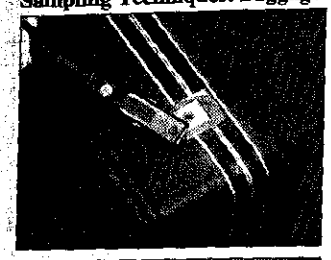
- Steering wheel
- Knobs and handles, including gear shift
- Bags and luggage

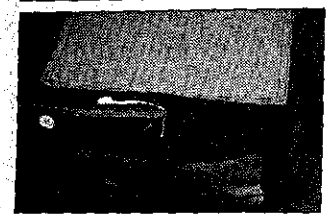
Other areas that may have fingerprints

Avoid sampling surfaces that may be coated with excessive dirt or oil and could potentially cause instrument contamination.

Sampling

Sampling Techniques: Baggage





Outside of Item:

- Zipper tabs
- Closure flaps
- Latches
- Handles and Straps

Inside of Item:

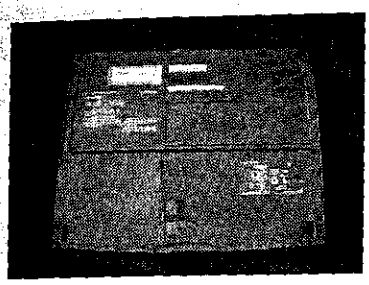
- Seams and seam closure points

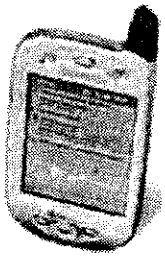
Commonly Touched Areas

Sampling

GE Ion Track

Sampling Techniques: Electronic Devices





Electronic Devices:

- Vents
- Seams
- Battery compartments
- Disk drives
- Edges
- Latches

Avoid Sampling:

- Computer Screens
- Camera lenses

PN: TM001016 rev:2

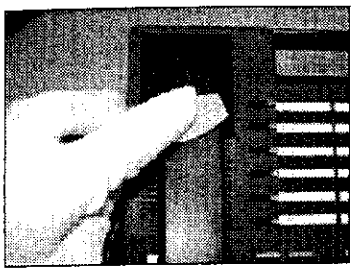
Avoid sample items such as laptop monitors, camera lenses or other items that may be susceptible to damage.

Proper sampling technique requires sufficient pressure to obtain a good sample and may damage sensitive items.

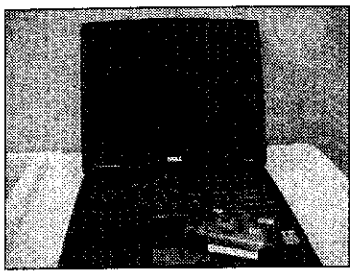
Sampling

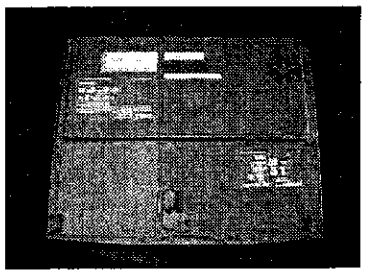
GE Ion Track

Review Questions



1. What are some sampling fundamentals?
2. What areas do we sample on bags?
3. What areas do we sample on electronic items?
4. What areas do we avoid sampling?





PN: TM001016 rev:2

1.
   -
   -
   -
2.
3.
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Analysis

Establishing an alarm response procedure is the responsibility of the organization that has purchased the equipment. Procedures described in this training material are for **example** only.

Upon successful completion of this topic the trainee will be able to:

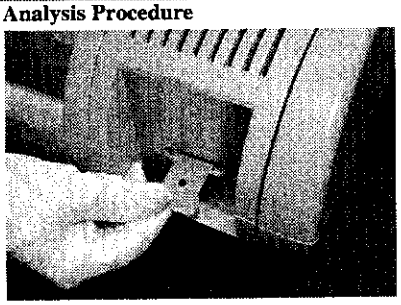
•Describe proper analysis procedures.

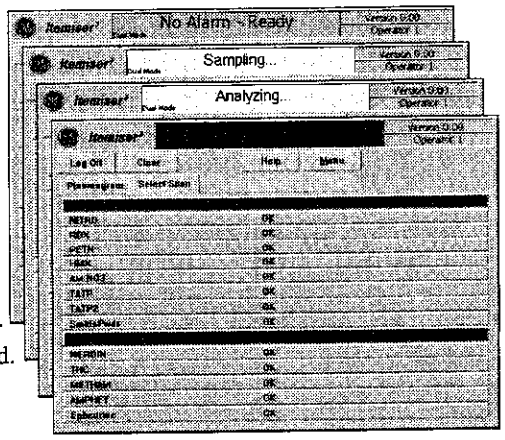
•Describe proper clearing procedures.

Analysis

GE Ion Track

Analysis Procedure





1. Place the sample trap into the Desorber.
2. Remove the sample trap when prompted.
3. Either
   No Alarm Ready or
   Explosives or
   Drugs or
   Contraband Detected
   in the Status Bar.

PN: TM001016 rev:2

Sample is taken then placed into the Desorber.

-If the Ready screen is displayed after analysis is complete then no contraband substances were detected.

-If machine alarms the substance detected will be displayed on the SelectScan screen.

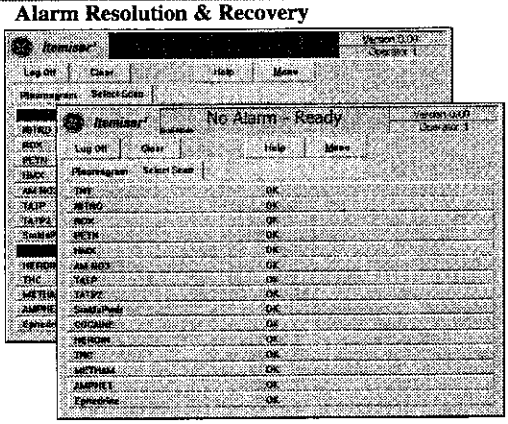
-In dual mode, "Contraband Detected" indicates drugs ***and*** explosives are detected simultaneously.

•The Alarm should be resolved in accordance with current operating procedures.

Analysis

GE Ion Track

Alarm Resolution & Recovery



Any alarm should be resolved in accordance with your organization's current operating procedures.

Such procedures should include:

- Clearing the Itemiser[3].
- Discarding the sample trap and gloves.
- Decontamination requirements.
- Obtaining a new sample trap and gloves.

PN: TM001016 rev:2

•If an alarm is detected then the sample trap and gloves must be discarded.

•If hand wand was used it should be cleaned with a GE Ion Track-supplied alcohol wipe.

-Clear the Itemiser[3] by selecting the Clear tab on the menu bar.

-After the unit returns to the No Alarm Ready screen use a new sample trap and check hands and table for contamination.

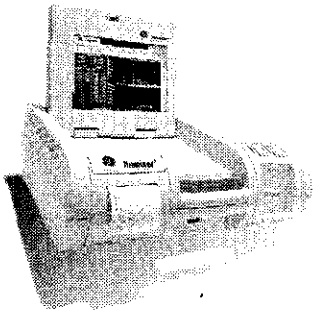
•All alarms must be cleared before any more samples can be analyzed.

•Make sure that you use only GE Ion Track alcohol wipes. Other types of wipes may contain chemicals that might contain contaminates.

Analysis

GE Ion Track

Review Questions:



1. Where is the sample trap placed in the Itemiser^3?
2. When is the trap removed?
3. What is the indication of an alarm? No alarm?
4. How do you clear the Itemiser^3?
5. What happens when the Itemiser^3 is contaminated?
6. When are the sample traps disposed of?

PN: TM001016 rev:2

1.

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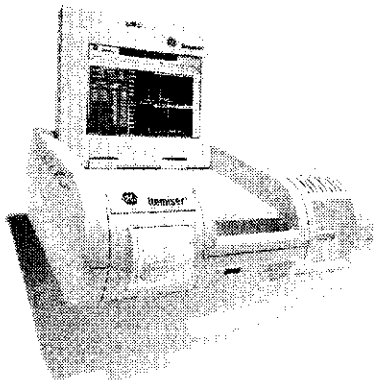
4.

5.

6.

Shift Maintenance

GE Ion Track



- Calibrate the system
- Check the printer paper
- Clean touchscreen and outside of unit with GE IonTrack provided alcohol wipes
- Clean and sample the work area to make sure it is free of contamination

PN: TM001016 rev:2

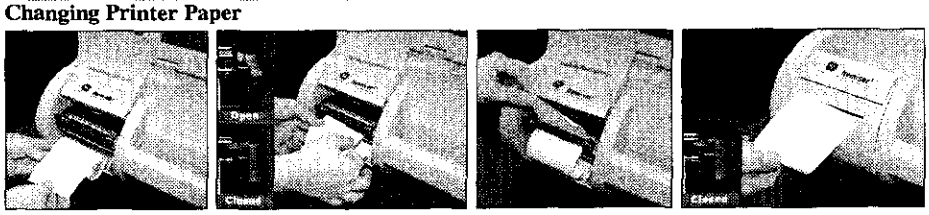
•Make sure that you use only GE Ion Track alcohol wipes.

•Other types of wipes may contain chemicals that might contain contaminates.

Shift Maintenance

GE Ion Track

Changing Printer Paper



1. Insert roll with paper rolling off the top. Pull out enough paper to feed through the print mechanism and through the slot in the door.
2. Open the green lever and feed the paper through the print mechanism.
3. Make sure there is enough paper to feed through the slot in the door.
4. Close lever and then close the printer door.

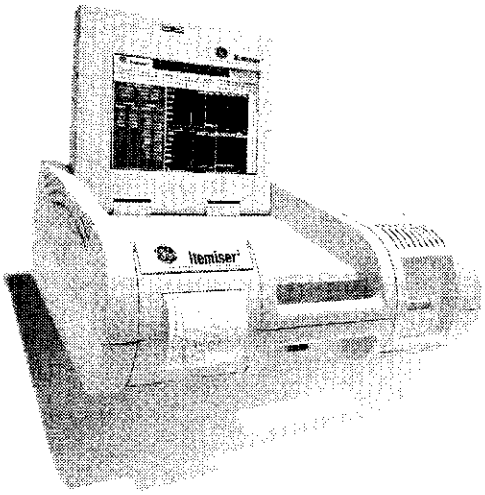
PN: TM001016 rev:2

Thermal paper prints on one side only.

Make sure green lever is closed.

Course Review

GE Ion Track



- Trace Detection
- Equipment Overview
- Calibration
- Sampling
- Itemiser^3 Analysis
- Shift Maintenance
- Questions

PN: TM001016 rev:2

If any warning occurs that has not been covered in this course, follow your local procedure for getting assistance.

FedCure FOIA Litigation

2005-03326

Cover Sheet

This Section Contains:

A. Manufacturing documents or studies stating the accuracy of the to Ion Spectrometer Scanning Methods

---

Location: FCI Englewood

Name and phone number of person conducting search:

K. Burton / S. Leyba

Itemiser^3

Preventive Maintenance Course

PN: TM001017 rev:3

Itemiser^3

Preventive Maintenance Course

PN: TM001017 rev:3

Prerequisites: ***Operator Course***

Course Objective: At the completion of this course the student will be able to properly operate and perform preventive maintenance of the unit without supervision.

Consumables & Accessories:

1. Identify and describe items needed for maintenance.

Basic Plasmagram Theory:

1. Describe the detector block diagram.

Menus:

1. Describe the menus and functions available for maintenance procedures.

Calibration:

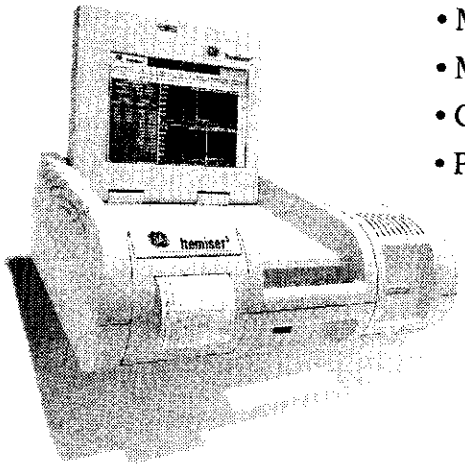
1. State the reasons for calibration.
2. Describe calibration procedures.
3. Demonstrate calibration procedures

Maintenance:

1. State the advantages of scheduled maintenance.
2. State the minimum scheduled maintenance requirements for the product.
   a. Weekly b. Monthly c. Annual
4. Perform the scheduled maintenance requirements for the product.

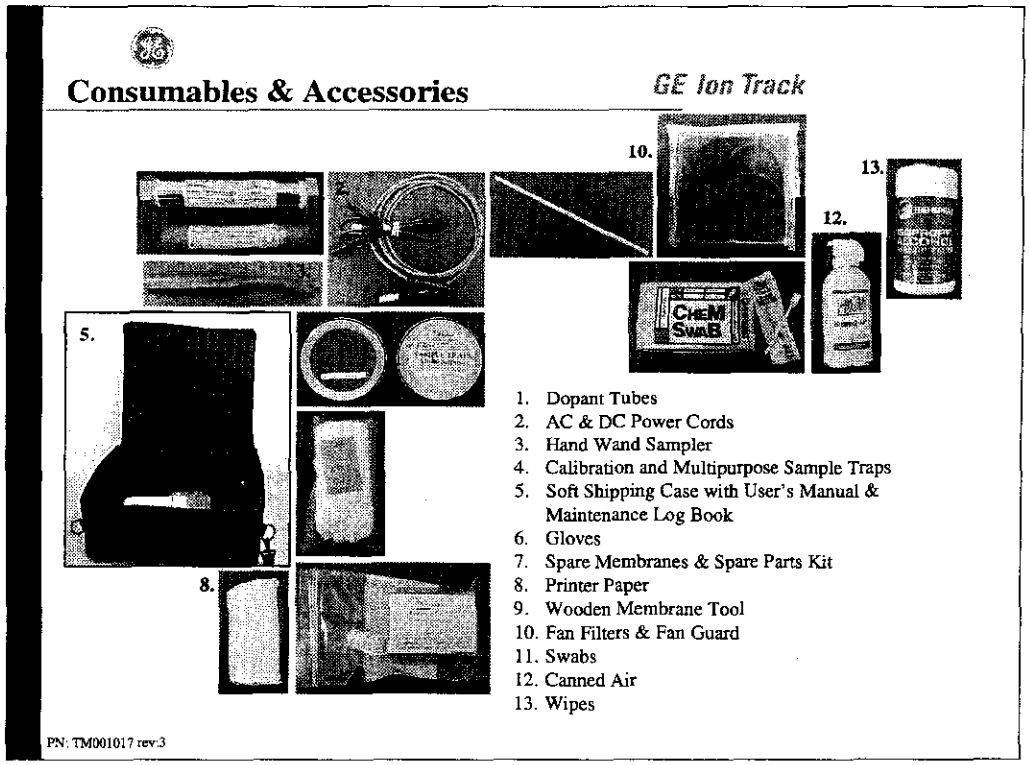
Course Overview

GE Ion Track



- Consumables & Accessories
- Basic Plasmagram Theory
- Maintenance Log On
- Menu
- Calibration
- Preventive Maintenance

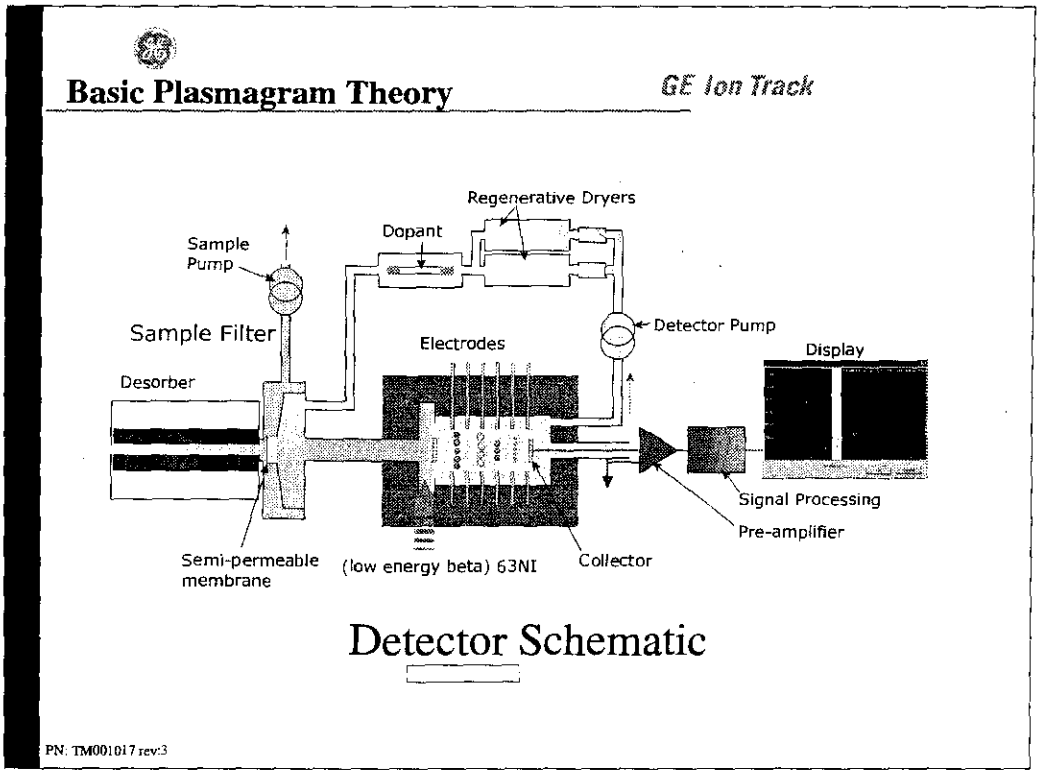
PN: TM001017 rev:3



These are the consumables and accessories you will need to do maintenance.

If the Dopants [Picture 1] are not immediately used, they should be stored in a freezer.

Check the "Best used by" date on the bottom of the Calibration and Multipurpose Sample Traps. [Picture 4]



Samples are collected with the sample traps and then vaporized by the Desorber

The vaporized molecules then pass through the semi-permeable membrane and into the detector

The molecules are ionized so that they can be mobilized through the detector by an electric field

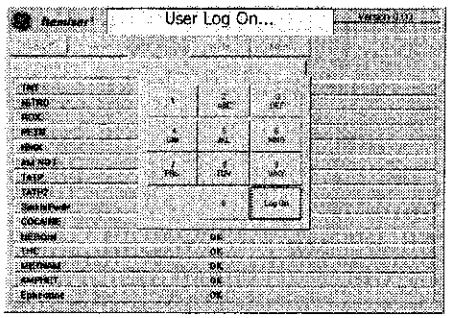
The length of time it takes a substance to pass through the detector is known as its "*time of flight*"

"time of flight" depends on the mobility of the ion

The peaks in the plasmagram are generated by the ions as they hit the collector.

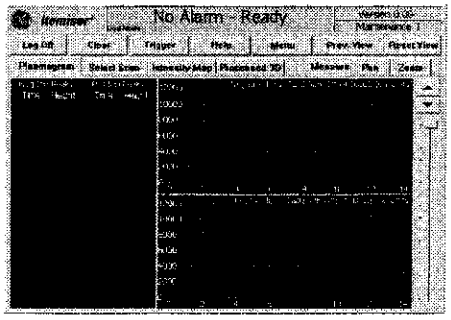
Maintenance Log On

GE Ion Track



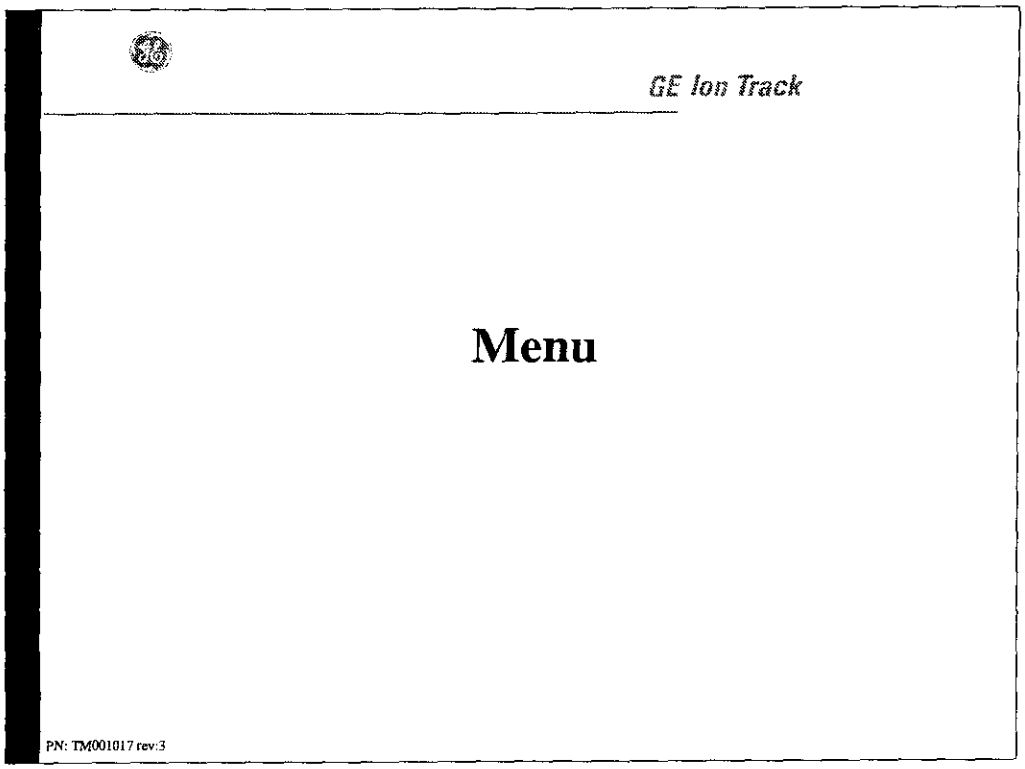
Log on:

- Enter Maintenance PIN:
- Select <Menu>



PN: TM001017 rev:3

The Maintenance PIN is determined by the administrator who set up the system.



Maintenance Menu:

File Functions:

- Recall
- Save
- Print

Edit Functions:

- Options
- Substances
- Users

View Functions:

- Config/Notes
- Status

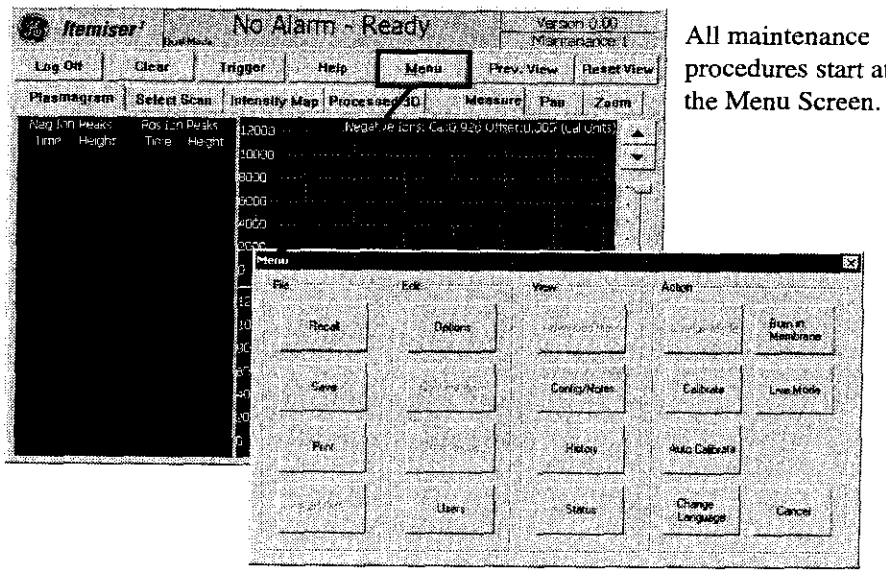
Action Functions:

- Change Mode
- Burn in Membrane
- Live Mode

Calibration will be covered in the calibration section.

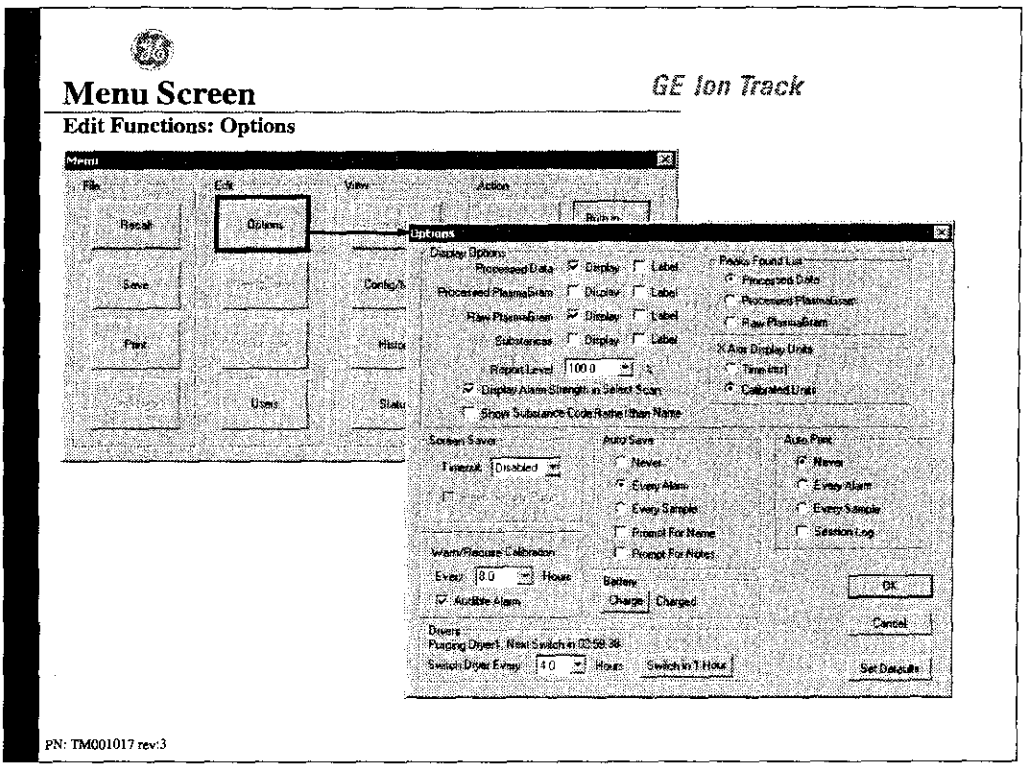
Menu Screen

GE Ion Track

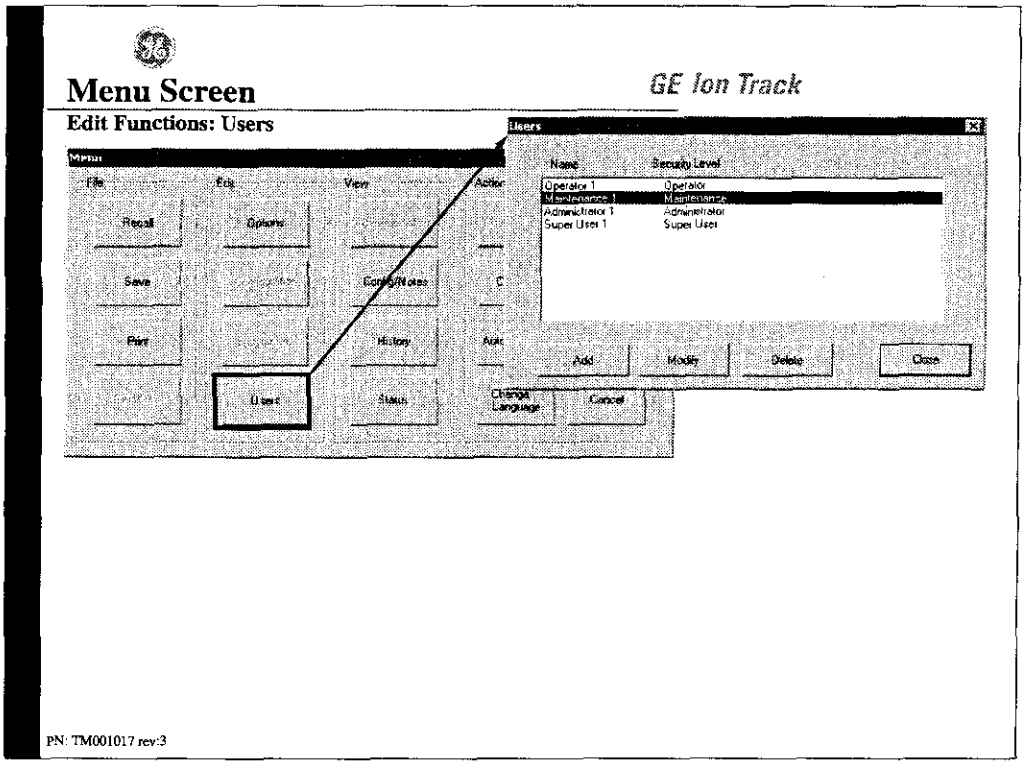


All maintenance procedures start at the Menu Screen.

PN: TM001017 rev:3

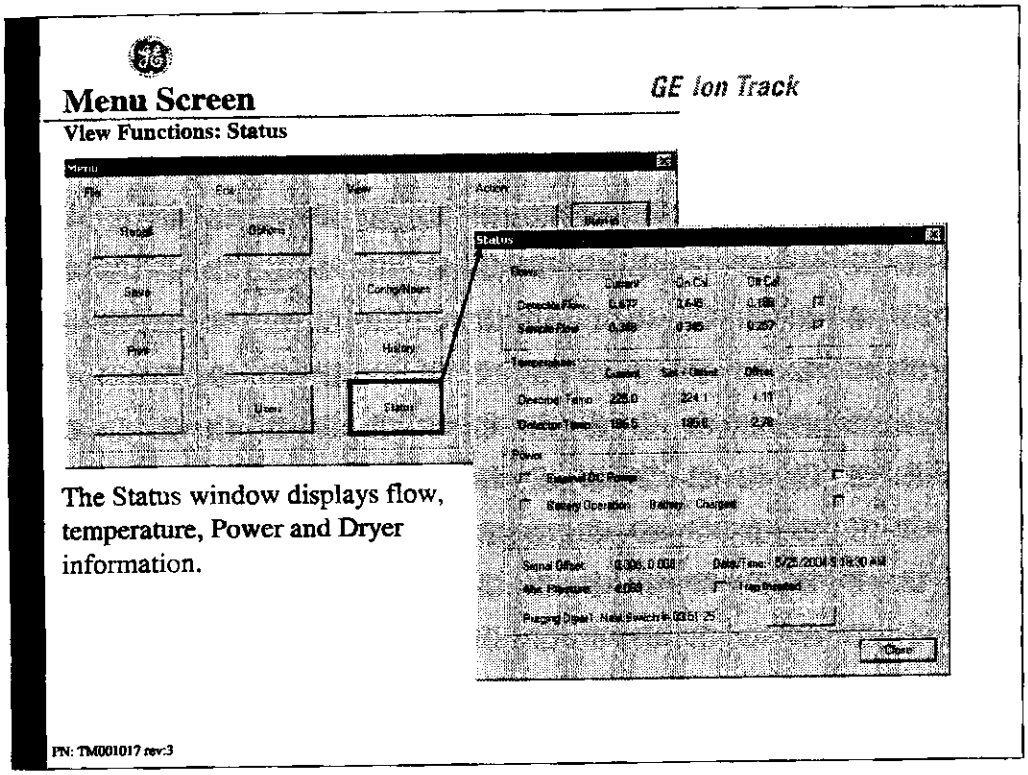


The Maintenance person needs to know how to access the Options screen. This screen contains information and functions that are used under the direction of the system administrator or GE IonTrack technicians.



Users:

A list of users and their access levels can be viewed on this screen. New accounts are created by the system administrator.



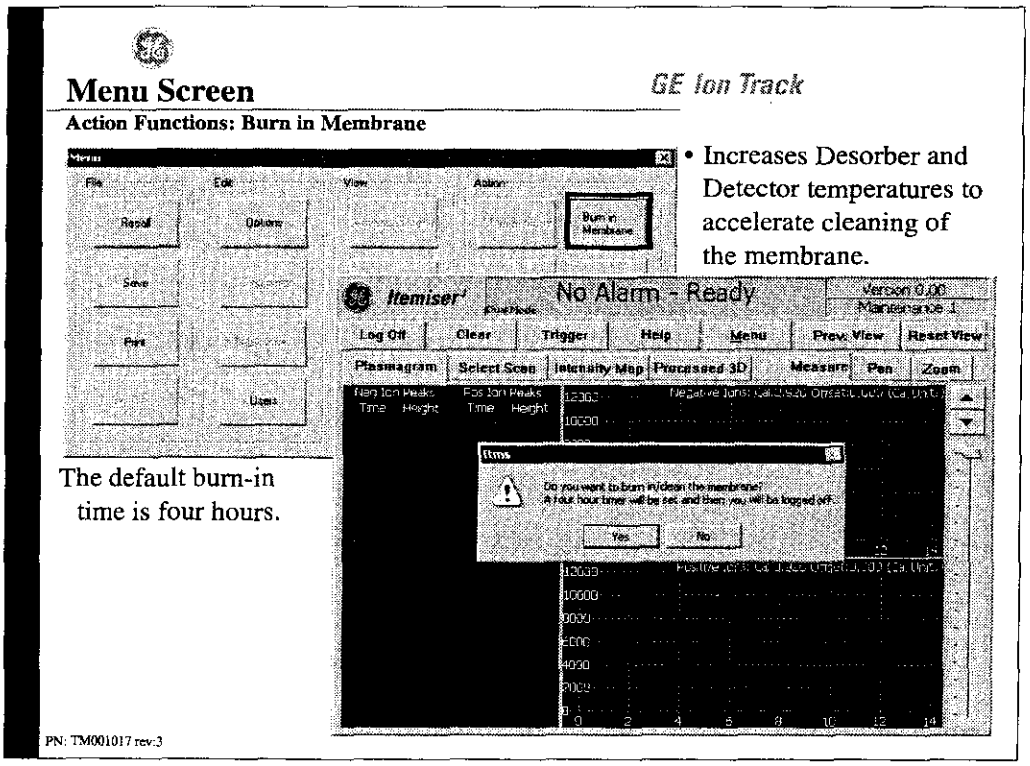
This screen contains information useful when initiating troubleshooting procedures or contacting GE Ion Track.

Flows & Temperatures:

Aids in trouble shooting the Itemiser^3.

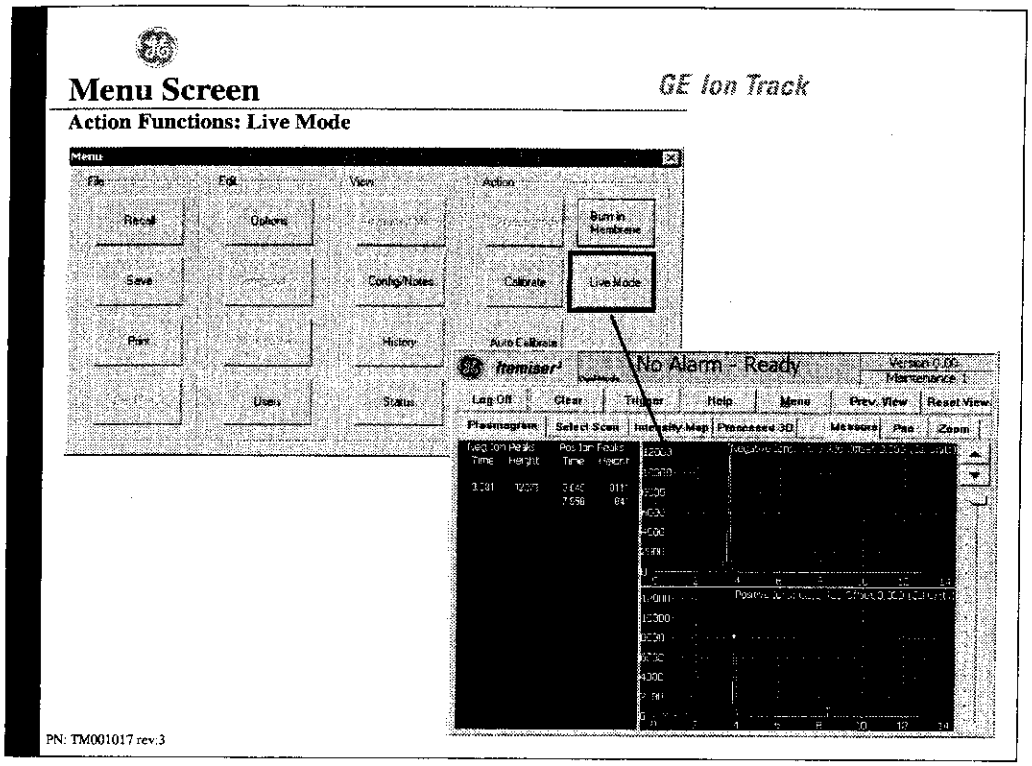
Power check boxes indicate External DC (car battery, etc.), Battery Operation. The Charge checkbox indicates if charging is in progress. Charging cannot be initiated from the checkbox because it will clear when the screen closes. Battery Status is also indicated ["Charged" in the example depicted].

Purging Dryer status is indicated along with how much time is left before change over. The <Switch Now> button can initiate the change over before the scheduled time.



Saying yes to "Burn in Membrane" results in a four hour period of raised temperature that burns off any contaminants that may have been introduced with the installation of a new membrane.

Initiating the burn in membrane cycle logs you off the system. This is provided as a security feature so that the burn in cycle can be started and the administrator does not have to wait all four hours to log out.



Live mode is a continuous display of what the detector is seeing.
The system will not detect a sample trap if left in live mode.

Calibration

GE Ion Track

Reasons for Calibration

Why Calibrate?

- Provides a known substance to be used as a reference to identify contraband.
- Compensates for changes in atmospheric pressure and humidity.
- Verifies proper system operation.

- **Auto-Calibration** is the preferred method of calibration.
- **If Auto-Calibration** fails, and there are no other warnings, then it will be necessary to perform a manual calibration and then reset the calibration defaults.
- **Dual Peak** is the preferred method for **Manual Calibration.**

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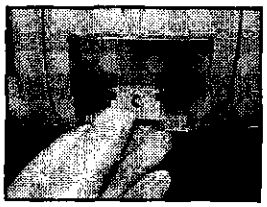
A successful manual calibration will not reset the calibration factors and the system may not Auto Calibrate until someone with Super User access resets the Calibration Factors. However, a successful Manual Calibration allows the system to be used to analyze samples.

Calibration

GE Ion Track

Auto-Calibration



- Auto-Calibration is the primary calibration method.
- The procedure is shown here, but is usually performed by the operator.

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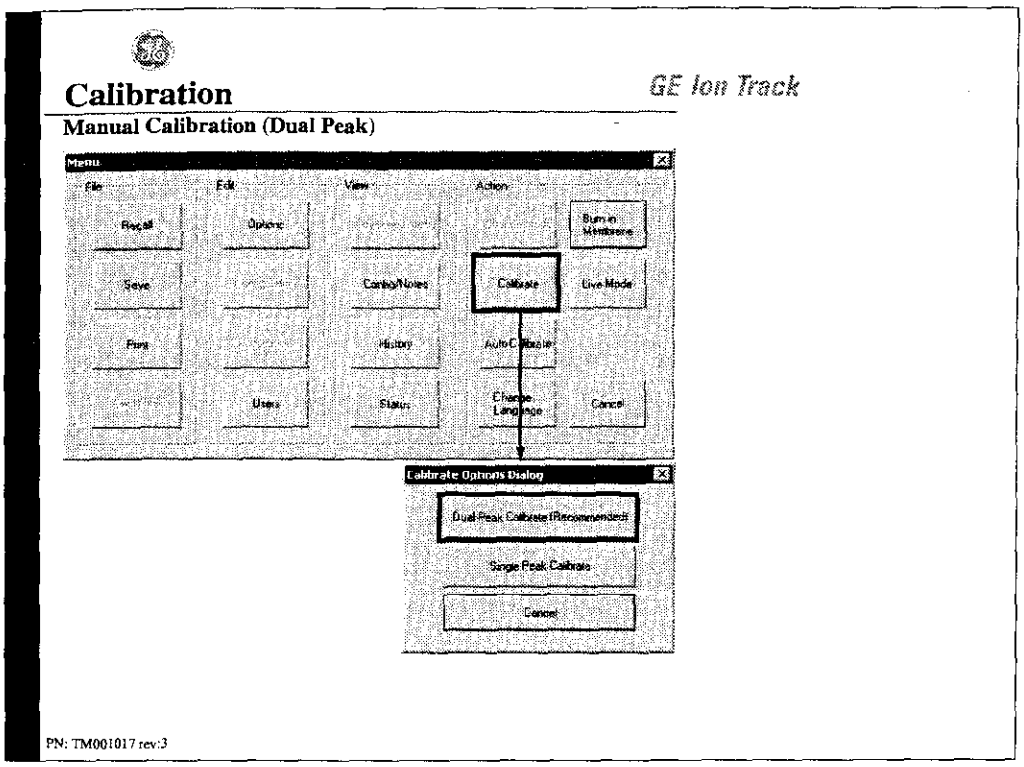
1. Press <Auto Calibrate>
2. When the Status bar asks for the Calibration trap, insert a Calibration trap into the Desorber.
3. The Itemiser^3 will sample then the Status bar will prompt for the removal of the Calibration Trap.
4. Discard Trap after removal.
5. The unit will go through an analysis then display calibration results in a pop-up window:
   Press OK to accept the calibration values shown on the screen.
6. Press <Clear> and let the Itemiser^3 clear.



The manual calibration routine can be accessed via the Menu screen.

"Dual Peak Calibrate" is the preferred manual calibration method.

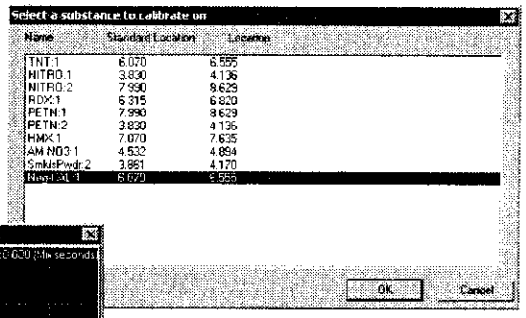
The system administrator should be notified if a manual calibration is required.

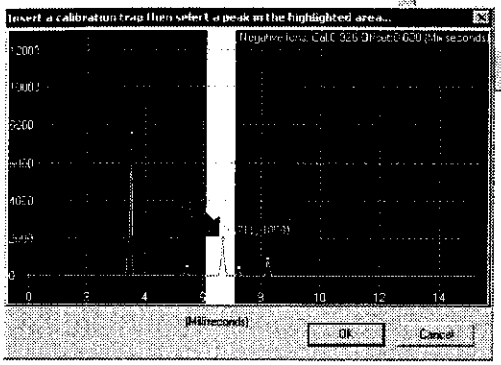
Calibration

GE Ion Track

Manual Calibration (Dual Peak)

1. Select Neg-CAL-1 and <OK>.





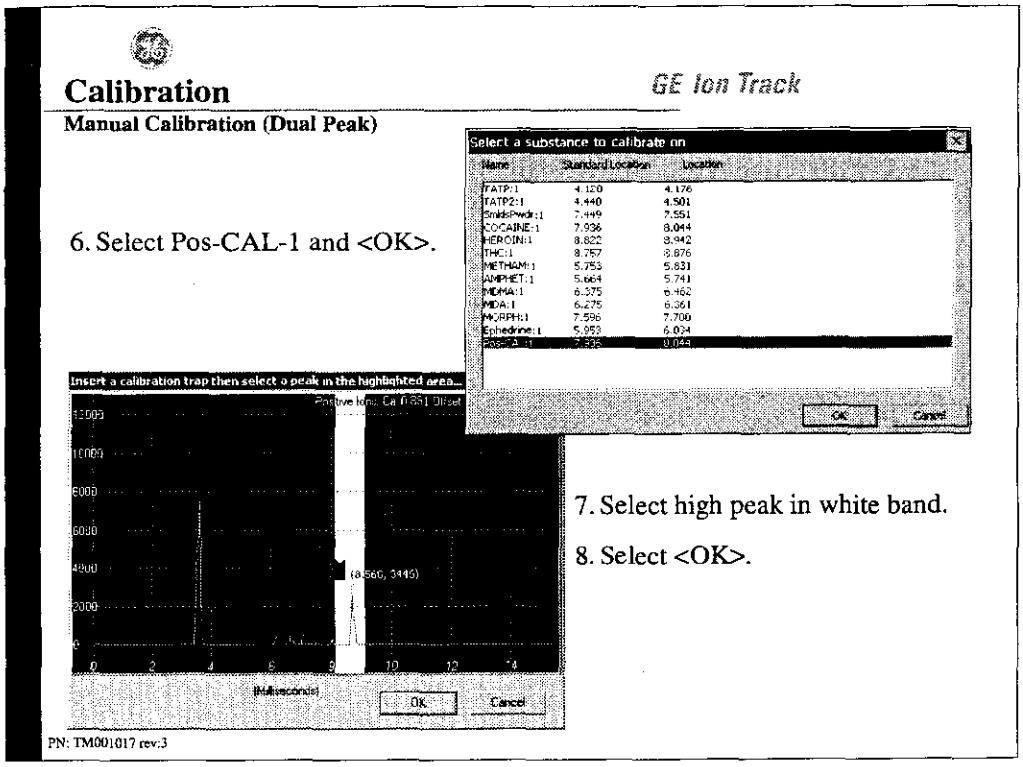
2. Insert the calibration trap.
3. Remove and discard the trap when directed.
4. Select high peak in or near the white band.
5. Select <OK>.

PN: TM001017 rev:3

Touch the top of the highest peak that is close to the "Standard Location" listed for the substance [Neg-CAL 1]. This should be in or near the white area on the screen. If it is necessary to do a manual calibration the peak may not be in the white band.

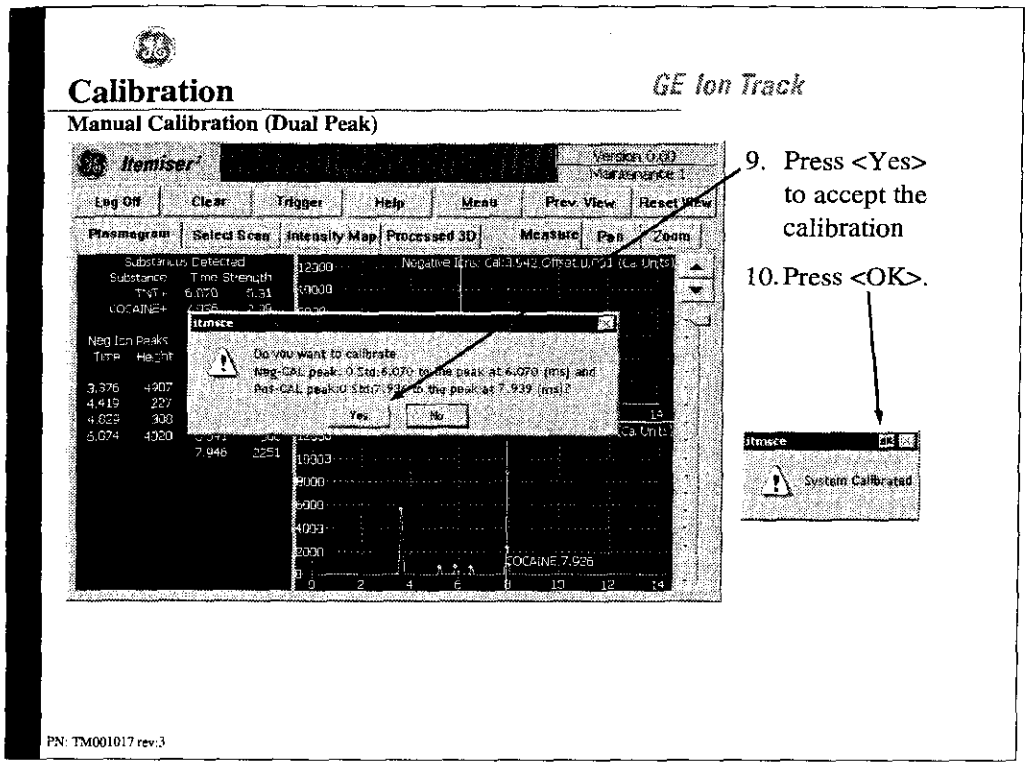
The spot will highlight.

Discard trap when finished.



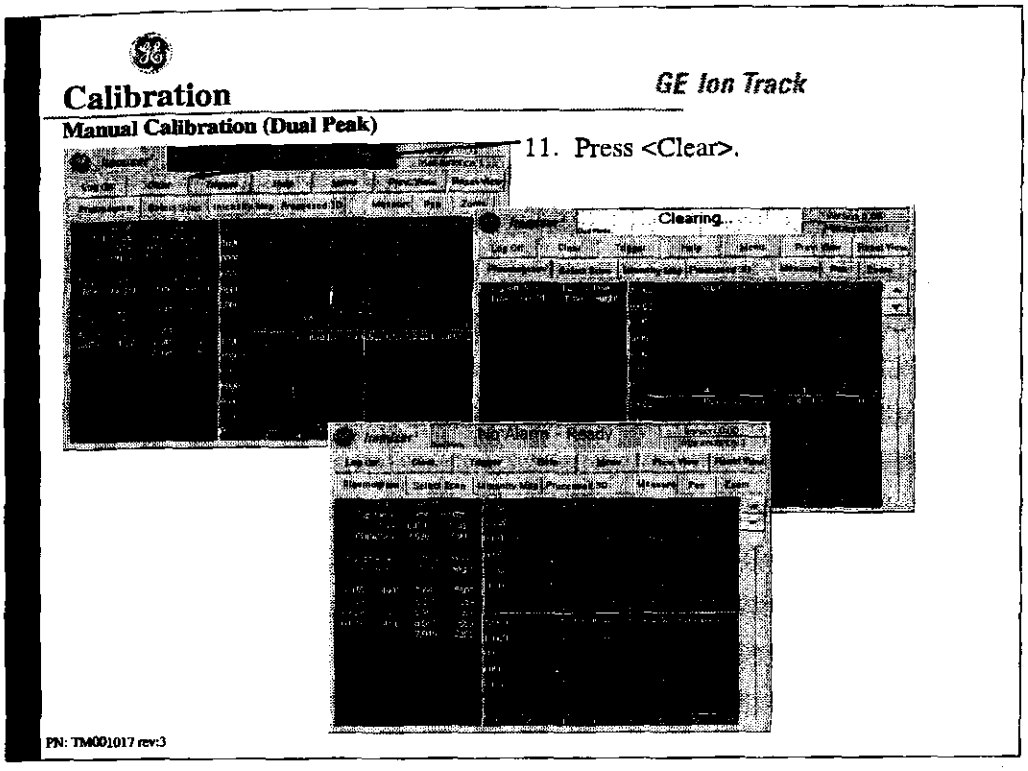
Touch the top of the highest peak that is close to the "Standard Location" listed for the substance [Pos-CAL 1]. This should be in or near the white area on the screen. If it is necessary to do a manual calibration the peak may not be in the white band.

The spot will highlight.



The user is prompted to verify the peak location. If the calibration is correct, press <Yes>.

A 'System Calibrated' message will appear. Press <OK>.



Clear the System after Calibration.

The system will perform multiple cleaning cycles until the system clears.

If the system fails to clear, or takes a long time to clear, it may be necessary to initiate troubleshooting procedures. Remember that particularly strong "hits" will take longer to clear.

Preventive Maintenance

Topic Objectives:

- State the advantages of scheduled maintenance.
- State the minimum scheduled maintenance requirements for the Itemiser^3
- Perform the scheduled maintenance requirements for the Itemiser^3.
- Weekly Maintenance
- Monthly Maintenance
- Annual Maintenance

Preventive Maintenance

GE Ion Track

Why Maintenance is Necessary

- Optimize system performance
- Keeps the sample and detector tubing clear of contamination
- Prevents nuisance alarms
- Minimize down time
- Reduce repair costs

PN: TM001017 rev:3

Preventive Maintenance

GE Ion Track

Weekly Maintenance: Checklist

- **Power down the system.**
- **Wear GE provided white cotton gloves while doing maintenance.**

1. Check/Clean the fan filter
2. Check dopant levels
3. Remove Desorber, Locking Ring and Nozzle
4. Remove Stainless Filter
5. Blow out Sample Air Line
6. Reinstall/Replace Stainless Filter
7. Clean/Inspect membrane
8. Clean/Reinstall Nozzle and Locking Ring
9. Turn Unit On (Allow temperature to stabilize)
10. Check Sample Flow (180 to 220 cc/min)
11. Check Detector Flow (180 to 220 cc/min)
12. Check Nozzle Flow (approx. 0.2 to 0.4 SCFH)
13. Clean and Re install Desorber

PN: TM001017 rev:3

The weekly maintenance procedures are listed, in order, in the Maintenance Log Book. The details of any specific procedure can be found in the User manual. All procedure should be tracked and recorded in the Maintenance Log Book.

Preventive Maintenance

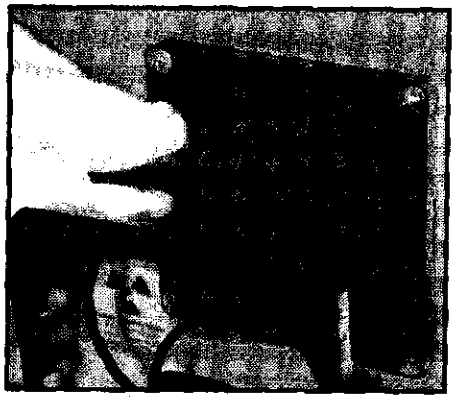
GE Ion Track

Weekly Maintenance: Check/Clean Fan Filter

1.a. Remove the plastic filter cover (snaps on and off).

1.b. Clean the fan filter with canned air.

1.c. Replace if damaged.



PN: TM001017 rev:3

Hands-on demonstration

Preventive Maintenance

GE Ion Track

Weekly Maintenance: Check Dopant Levels

2.a. Carefully pull with a twisting motion.

2.b. The large tube is the Dichloromethane (negative ion) Dopant, and the three small tubes are Ammonia (positive ion) Dopants. Replace any tubes that are empty.

PN: TM001017 rev:3

Use only GE Ion Track supplied dopants

Preventive Maintenance

GE Ion Track

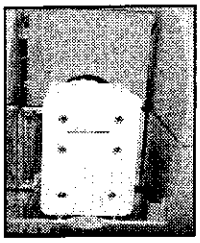
Weekly Maintenance: Remove Desorber, Locking Ring & Nozzle

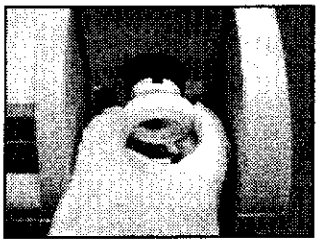
Caution: Desorber is hot

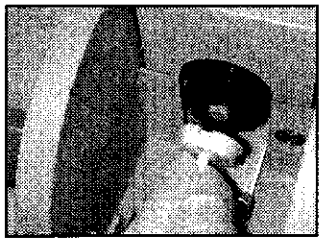
3.a. Remove Desorber and let cool

3.b. Unscrew locking ring

3.c. Remove nozzle







PN: TM001017 rev:3

Weekly Maintenance

GE Ion Track

Weekly Maintenance: Remove Sample Filter

4.a. While the Desorber is out, unscrew the filter cover.

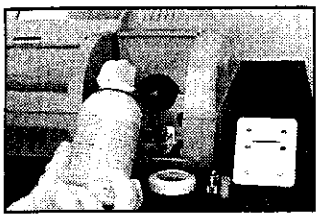
4.b. Remove filter with wooden tool.

PN: TM001017 rev.3

Preventive Maintenance

GE Ion Track

Weekly Maintenance: Blow Out Sample Line



5.a. With nozzle removed, blow air through the air line entrance to the right of the membrane.

5.b. Blast the air for 8 to 10 seconds. (hold can upright)

PN: TM001017 rev:3

Weekly Maintenance: Reinstall/Replace Sample Filter

6.a. Check the filter. Replace if discolored.

6.b. Reinstall filter.

6.c. Reinstall the filter cover.

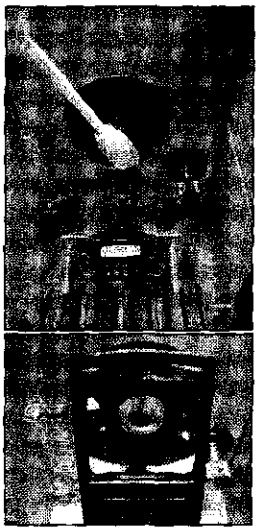
Preventive Maintenance

GE Ion Track

Weekly Maintenance: Clean / Inspect Membrane

7.a. Gently clean the membrane with the side of an alcohol swab.

7.b. Inspect the membrane for damage. Replace if necessary. [see monthly maintenance for replacement procedure.]



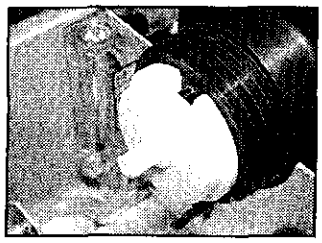
PN: TM001017 rev:3

Do not poke the membrane. Use the flat side of the swab to gently clean the front of the membrane.

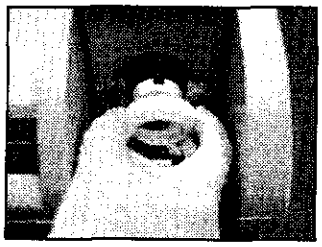
Preventive Maintenance

GE Ion Track

Weekly Maintenance: Clean and Reinstall Nozzle & Locking Ring



8.a. Reinstall Nozzle.



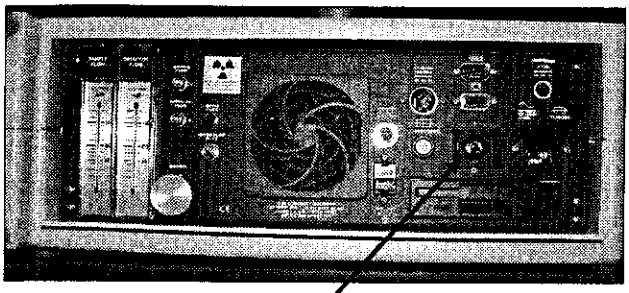
8.b. Reinstall locking ring.

PN: TM001017 rev:3

Preventive Maintenance

GE Ion Track

Weekly Maintenance: Power Up Itemiser^3.

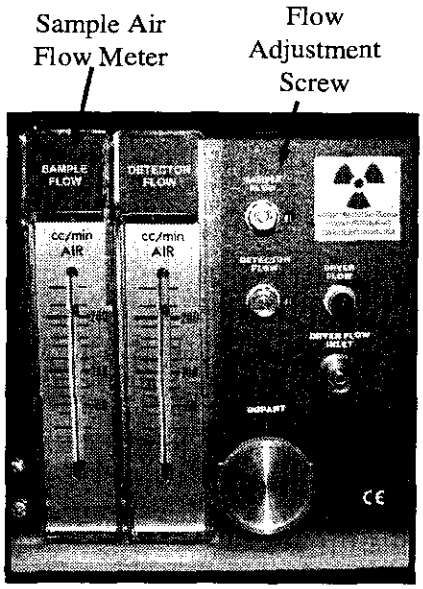


9. Power up the Itemiser^3 and allow it to warm up until the temperatures stabilize.

Preventive Maintenance

GE Ion Track

Weekly Maintenance: Check Sample & Detector Air Flow



10.a. Check Sample flow. Should be between 180 and 220 cc/min.

Only if adjustment is needed:

10.b. Loosen locking nut on adjusting screw.

10.c. Turn Screw small amounts [no more than a quarter turn] to adjust flow. Allow time for flow to settle before readjusting. Adjust to between 180 to 220 cc/min.

10.d. Tighten locking nut.

PN: TM001017 rev:3

It is normal to have small changes in the flow gauges. The setting may vary by 10 % (180 to 220).

The flow adjusters have locking nuts. If an adjustment is necessary, loosen the lock nut, make the adjustment, and tighten lock nut. (do not over-tighten)

Preventive Maintenance

GE Ion Track

Weekly Maintenance: Check Sample & Detector Air Flow

Detector Air Flow Meter

Flow Adjustment Screw

11.a. Check Detector flow. It should be between 180 and 220 cc/min.

Only if adjustment is needed:

11.b. Loosen locking nut on adjusting screw.

11.c. Turn Screw small amounts [no more than a quarter turn] to adjust flow. Allow time for flow to settle before readjusting. Adjust to between 180 to 220 cc/min.

11.d. Tighten locking nut.

PN: TM001017 rev:3

It is normal to have small changes in the flow gauges. The setting may vary by 10 % (180 to 220).

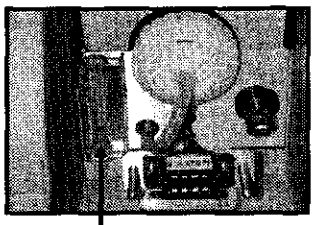
The flow adjusters have locking nuts. If an adjustment is necessary, loosen the lock nut, make the adjustment, and tighten lock nut. (do not over-tighten)

If, after checking and adjusting Sample and Detector Flows, there is a flow cal alarm, then you will have to contact the system administrator to <Calibrate Flows> in the advanced menu.

Preventive Maintenance

GE Ion Track

Weekly Maintenance: Verify Nozzle Flow



12.a. With Desorber removed, attach the plastic hose from the flow gauge to the nozzle.

12.b. Make sure the gauge reads 0.2 to 0.4 SCFH

PN: TM001017 rev:3

This reading may vary from slightly under 0.2 SCFH to around 0.4 SCFH.

If the flow has changed significantly after a membrane change:

•Check the membrane for Damage

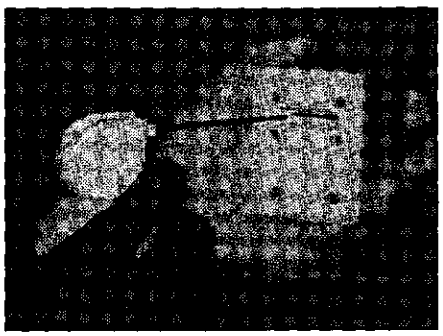
•Make sure the nozzle is sealing properly against the membrane

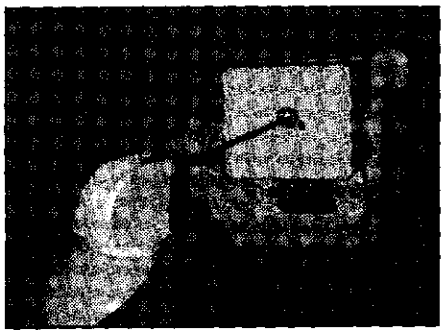
This is a test done in the weekly maintenance after cleaning the membrane. This test should also be done after changing the membrane in monthly maintenance to make sure the nozzle is seated around the membrane.

Preventive Maintenance

GE Ion Track

Weekly Maintenance: Cleaning Desorber





13. Clean and reinstall the Desorber

PN: TM001017 rev:3

After the Desorber has cooled down, blow out the area where the sample trap enters. Hold the air hose up to the Desorber and blow out any contaminants. Clean the outside area where the trap enters with an alcohol swab.

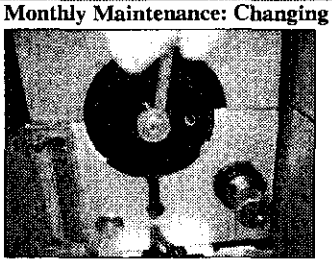
Do not insert the plastic tube into the Desorber. The Desorber may still be hot enough internally to melt the air hose!

Re-install Desorber unit.

Preventive Maintenance

GE Ion Track

Monthly Maintenance: Changing the Membrane

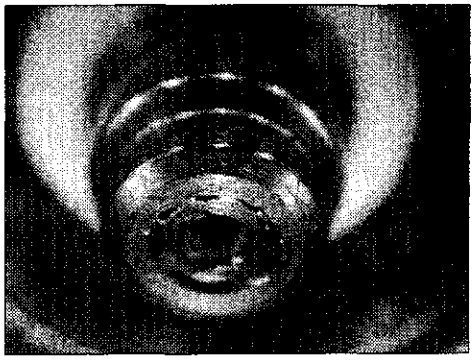


Monthly maintenance is the same as weekly except that the membrane is changed instead of cleaned.

Wear gloves for this procedure, and do not use metal tools on membrane!

1. The Wooden Membrane Tool helps when removing membrane, and pieces of membrane that stick.

Caution: When removing the old membrane from the Interface housing, you must only use the wooden membrane tool. Use of a metal instrument will damage the surface of the Interface.



PN: TM001017 rev:3

Depending on your application, the membrane may need to be changed more frequently due to contamination build up.

Remove the Desorber, locking ring, and nozzle (as when cleaning membrane)

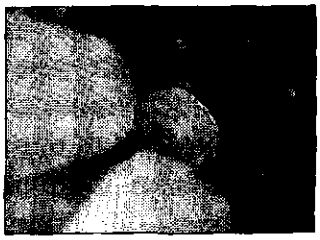
Remove the old membrane, clean the area where the membrane seated with alcohol swab.

Preventive Maintenance

GE Ion Track

Monthly Maintenance: Changing the Membrane

2. Install new membrane as shown. Carefully inspect membrane to ensure no tears occurred during installation.



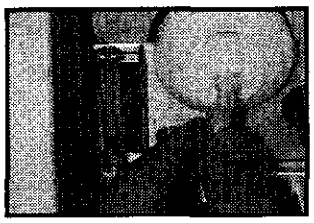
PN: TM001017 rev:3

While holding the membrane by the thick edges, gently press on the new membrane.

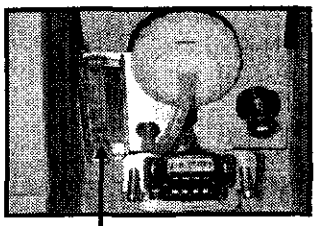
Preventive Maintenance

GE Ion Track

Monthly Maintenance: Verify Nozzle Flow



3. With Desorber removed, attach the plastic hose from the flow gauge to the nozzle.



4. Power up the Itemiser[3] (warm up for 10 minutes), and make sure the gauge reads approx. 0.2 to 0.4 SCFH

PN: TM001017 rev:3

This reading may vary from slightly under 0.2 SCFH to around 0.4 SCFH.

If the flow has changed significantly after a membrane change:

•Check the membrane for Damage

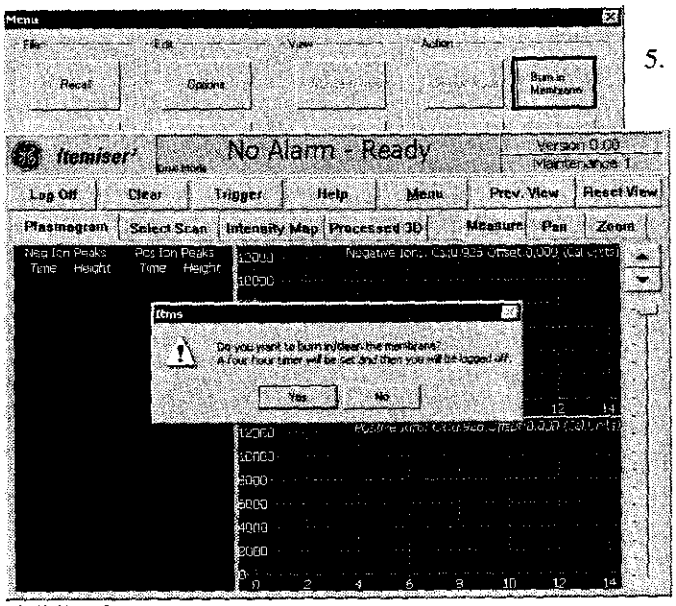
•Make sure the nozzle is sealing properly against the membrane

This is a test done in the weekly maintenance after cleaning the membrane. This test should also be done after changing the membrane in monthly maintenance to make sure the nozzle is seated around the membrane.

Preventive Maintenance

GE Ion Track

Monthly Maintenance: Membrane Burn in



5. Re-install Desorber, Select Menu then Burn in Membrane. Saying "Yes" results in a four hour period of raised temperature.

PN: TM001017 rev:3

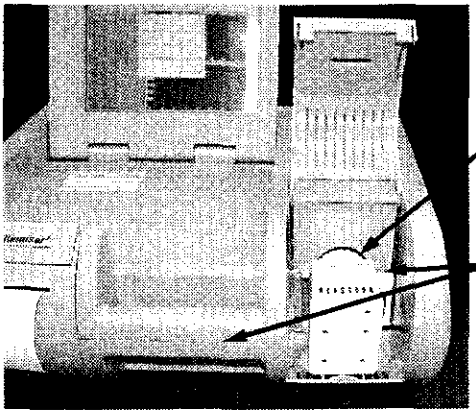
Using "Burn in Membrane" burns off any contaminants that may have been introduced with the installation of a new membrane.

The system will logout at the start of the burn in cycle.

Preventive Maintenance

GE Ion Track

Annual Maintenance: Radiation Wipe Testing



Radiation Wipe Test Locations

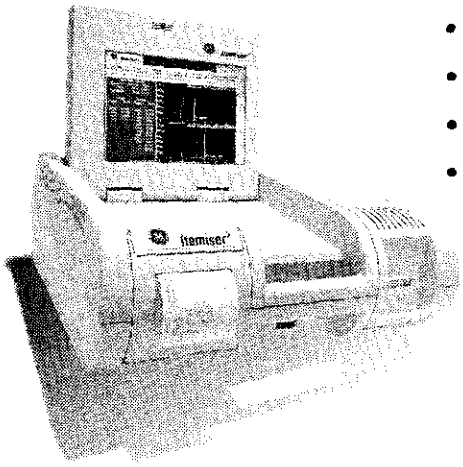
Remove Desorber and wipe around the nozzle area.

Wipe along seams of the instrument, particularly near the nozzle

PN: TM001017 rev:3

Once a year, an GE Ion Track authorized testing facility will offer our customers a radiation test kit. These wipe test kits contain instructions on how to perform a wipe test along with treated swabs to perform the wipe test.

Summary



- Consumables & Accessories
- Basic Plasmagram Theory
- Maintenance Log On
- Menu
- Calibration
- Preventive Maintenance

FedCure FOIA Litigation

2005-03326

Cover Sheet

This Section Contains:

C. Information related to the training methods used for operators

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Location: FCI Englewood

Name and phone number of person conducting search:

K. Burton / S. Leyba

United States Government Memorandum

FCI Englewood

Date: December 17, 2007

Reply To Attn of: (b)(7)c

Subject: ION Spectrometry Device Training

To: (b)(7)c

On Monday, December 17, 2007, at approximately 2:45 p.m., in accordance with Program Statement 5520.01, page 16, the following staff members received the required training prior to assuming any visiting posts for the 4th quarter:

(b)(7)c

United States Government Memorandum

FCI Englewood

Date: March 14, 2008

Reply To Attn of (b)(7)c

Subject: ION Spectrometry Device Training

To: (b)(7)c

On Friday, March 14, 2007, at approximately 3:10 p.m., in accordance with Program Statement 5520.01, page 16, the following staff members received the required training prior to assuming any visiting posts for the 1st quarter:

(b)(7)c